

CALIFORNIA
STATE
LIBRARY

THE AMERICAN
ARCHITECT



ILLUSTRATIONS
AND READING
MATTER PERTAIN-
ING TO ARCHITECT-
URE AND ALLIED
ARTS

PUBLISHED WEDNESDAYS IN N.Y. — FOUNDED 1876 —
VOLUME CIV JULY 2, 1913 NUMBER 1958.



The Union Station at Worcester, Mass., has 2,500 Square Feet of Luxfer Sidewalk Lights in the Roof of the Train Sheds and Platforms. This is a good example of the adaptability of Luxfer Lights for Roofs, Floors, Sidewalks and other surfaces which have to withstand heavy loads, yet admit daylight to the floors underneath.

For this installation the reinforced concrete slabs, with the glass lights set in, were made up at our factory and installed in place by our own skilled workmen, thereby saving a good deal of time and trouble.

The Luxfer System was specified because of its *known efficiency in daylighting* problems. Luxfer delivers more daylight, lasts longer and is far more economical than any other system. These facts have been proven by 34,000 installations.

Shall we send you the book "Luxfer Daylighting" ?

AMERICAN Luxfer Prism COMPANY

CHICAGO Heyworth Building
BOSTON 49 Federal Street
CLEVELAND 419-20 Citizens' Building
DULUTH 106 W. Michigan Street
INDIANAPOLIS 7 E. Market Street
KANSAS CITY 948 N. Y. Life Building

MILWAUKEE Stroth Building
NEW YORK 507 W. Broadway
NEW ORLEANS 904 Hennen Building
PHILADELPHIA 411 Walnut Street
ROCHESTER 38 Exchange Street

ST. PAUL 615 Ryan Building
MINNEAPOLIS 507 Andrus Building
DALLAS Builders' Exchange
SAN FRANCISCO 445-47 Turk Street
LOS ANGELES 928 S. Main Street





MANTEL IN A HOUSE IN RICHMOND TERRACE, LONDON
MR. GEORGE DEVEY, ARCHITECT

THE AMERICAN ARCHITECT

VOLUME CIV.

WEDNESDAY, JULY 2, 1913

NUMBER 1958

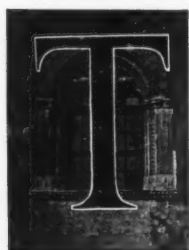


SATURNALIA. ERNESTO BIONDI, SCULPTOR

SOME RECENT TENDENCIES IN SCULPTURE

By LORADO TAFT

AN ADDRESS DELIVERED BEFORE THE FORTY-SIXTH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS



THE most ancient and enduring of the arts has like all things human, its fashions. Styles come and go in the sculptors' studios, as in the millinery shops; the changes, however, are slower, and the discredited products of the chisel remain inexorably permanent for the diversion of new generations. Now and then a work conquers our esteem through sheer beauty or disarms us by reason of its quaintness; but out of the weed-like crop of any period, little there is that survives the ephemeral moment which gives it birth.

In the story of France, Gothic sculpture was developed from the Romanesque, and

gave way in turn before the insinuating appeal of the Italian Renaissance. This new gift of the South, transplanted to Gallic soil, developed unforeseen qualities of adaptability, and delighted the world with its charm in the hands of Jean Goujon and Germain Pilon, followed by Puget and Coysevox, but faded utterly before Italy's next invasion under the banner of Canova.

And so it is today. To some of us whose memories hark back lovingly to halcyon student days in the early eighties, when France's modern school was in its prime, making Paris the Mecca of all the world—to us it seems that no such nobility of united purpose and grandeur of concerted result is to be found in the story of the centuries since the nameless cathedral-builders made real their splendid dreams

THE AMERICAN ARCHITECT

all over northern France. The medieval sculptors carved "to the glory of God" and their native town. This later group may have been less directly concerned in the glory of God, but was certainly inspired by a lofty sense of citizenship and a desire to uphold the fair fame of France. To one who has known and revered Paul Dubois, Henry Chapu, and Barrias, who has delighted in the ingenuity of St. Marceaux, the magic touch of Falguiere, the fire and grace of Mercié's "David" and "Gloria Victis," the ethereal charm of the "Aurora" of Delaplanche, and who after all these years cannot think of the earnestness and integrity of these men without a thrill of emotion—to such a pilgrim a visit to the Paris of today brings grievous disappointment. The giants are all gone. Fremiet, the last of that early brotherhood died this year. Mercié, a younger man, rises no more to those youthful heights. Even Rodin, the great insurgent, has become harmless now. Old and prosperous, he has done nothing of interest in the last ten years, to the regret of his many admirers.

Realism and unbridled cleverness have run their course, and the jaded critics find refreshment in wilful bungling and pretence of naïveté.

One protests that these things are merely the froth of the annual exhibitions, that there is always a great body of admirable work, less obtrusive, because decent. This is doubtless true, but the fact remains that the general trend is pretty clearly indicated by the character of recent public monu-

ments. Can you recall a single distinguished work erected in Paris since 1900? On the other hand, the ignoble "stunts" given hopeless eternalization there within the last few years, are too many to catalogue. Rodin is undoubtedly the greatest sculptural genius of our time, but this master of form has taken nearly two decades to complete a formless monument to Victor Hugo. He proved early in his "Claude Lorraine" that he ignored the most elementary re-

quirements of a work to be seen from a distance. Like the two French sculptors who erected, under the very shadow of the Athenian Acropolis, that strange white confusion to the memory of Lord Byron, this mighty dreamer has neglected more than once to make his work legible, and though constantly seeking, as he tells us, "to find the latent heroic in every natural movement," he has often failed to express himself in nobility of line. One should not hold him personally responsible for the present decadence any more than we can change the decline of the Italian Renais-

sance to Michel Angelo, yet he is not blameless, for the eminence of the master makes his influence all-powerful. His weaknesses and peculiarities are more easily copied than his real inherent strength, the growth of a lifetime. So the lesser men follow, developing with enthusiasm any license encouraged by such high example. Rodin's carelessness of the silhouette has been gratefully emulated by an army of young sculptors and by not a few of the older men as well. Dalou's tribute to Delacroix



THE THINKER. AUGUST RODIN, SCULPTOR

THE AMERICAN ARCHITECT



NUDE FIGURE. ERNST SEGER, SCULPTOR

in the Luxembourg Gardens is an unhappy tribute to Rodin also in that it is one of the most offensive and pernicious examples of the new method. The stolid bust of the painter is assailed by a nude female of adventurous mien, who endeavors to climb his slender pedestal in order to decorate him. Her voluptuous form is precariously supported by a violent figure of "Time," who, taxed to the utmost, is encouraged by Apollo with outstretched, applauding hands. The impression of tumultuous acrobatics is undignified and irritating beyond words. There is no sense of eternity where time plays such pranks.

The present generation follows pellmell. Puech, once so promising, showed steady decline after that early and truly beautiful work, "The Muse and André Chenier," in the Luxembourg.

His famous relief, "The Nymph of the Seine," was too true to be good, too faithful to fact to be very noble sculpture, a dainty and fragile nude of most personal look. Such things may perhaps be excusable in

relief, protected, as they are, by the conventions of that delicate form of sculpture, but they point a dangerous tendency. Two recent works of a public character by M. Puech are lamentable. A class memorial in a Manual Training School shows a saucy Parisienne, quite nude, of course, seated upon an anvil and toying with a pair of pincers. The union of assurance and inadequacy suggested by the blithe young lady of the up-to-date coiffure is symbolic of the mentality of an artist who could design such a work as a fit personification of intelligent toil. This popular sculptor has done one thing even more ludicrously unfortunate. His monument to a certain admiral, on the Avenue de l'Observatoire, shows the portrait bust of a hero of Oriental seas rising from a surging tangle of tritons and mermaids, waving arms, palm branches, and carved paddles. Confusion reigns. The very commonplace admiral, with the Dun-



SPIRIT OF THE SNOWY ALPS. MEMORIAL TO SEGANTINI. M. BISTOLFI, SCULPTOR

dreary side-whiskers, seems to find it impossible to conceal a look of polite inquiry in the face of this sculptural explosion.

M. Larche carved a while back a delightful group, "Les Violettes," three little

THE AMERICAN ARCHITECT

children, exquisitely tender and poetic, in guise of violets. The same sculptor's monument to Corot, recently erected, is a pitiful conception. A bust of the great painter upon a formless pedestal built



TWO FRIENDS. CH. PAILLET, SCULPTOR

apparently of clouds; then the inevitable nude woman playing hide-and-seek with the public, though ostensibly paying homage to the bust. She is not one of Corot's vaporous idealizations, but evidently a portrait, face and body, of the model who posed for the figure. One feels that the honest old paysagiste would have been embarrassed by the juxtaposition.

Roger-Bloche modeled a few years ago his striking group "Le Froid," the unhappy pair whom you may have seen shivering some torrid July noon at the entrance of the Luxembourg. Last year this artist employed his notable talents in "L'Accident," a gathering of the detached figures around a workman fallen at a street corner; a bit of journalism of wonderful skill and characterization, but having no sculptural intent.

Lefevre's relief, "Springtime," shows three young couples in realistic modern costumes walking up the side of a great block of marble. They are separated by some distance, and have no relation to each other. "Aux Champs" is a peasant, with a wheelbarrow heaped high with hay. He is followed by his wife, and there is no structural reason why the procession should not include a dozen children, dogs, and farm animals strolling in as casually as a baby's Noah's ark figures.

These things are significant because they are not the work of ignorant beginners, but are the presumably mature expressions of the leaders and men of standing in modern sculpture. Others emulate Rodin in eager portrayal of the primitive passions, vulgarizing with insistent ostentation of the most sacred things in life. Insensible to the charm and poetry of suggestion, such crude disciples of modernism picture everything with a brutal frankness that repels. Sculpture has become taxidermy, and their stuffed men and women lack only color and real hair to vie with the tableaux of ethnological and surgical museums.



PIERROT. A. VERMARE, SCULPTOR

THE AMERICAN ARCHITECT

One understands now the warning of that great artist and seer, Bartholomé, whose noble monument, "Aux Morts," you have seen at Péré La Chaise; "There will be no new renaissance of French sculpture until the young modelers turn once more to the limestone of which the cathedrals were built, and carve great, simple figures in it, as did the medieval masters." Out of the exigencies of such a material might be developed a grave and simple art, a new school of sculpture.

Most of us have been accustomed to think of modern Italian sculpture as hopeless beyond redemption. We recall the plastic jokes and indecencies at our world's fairs, the patient carvings, garlanded with the cards of hundreds of purchasers; we shudder at memories of the Campo Santos of Milan and Genoa and we dismiss them utterly. At the Columbian Exposition the only interesting work in the Italian section was made by a Russian whose mother was an American, and at the next fair Prince Troubetskoy did not exhibit. Biondi's "Saturnalia" epitomized cruelly, but not unjustly, the trend of contemporaneous sculpture in Italy, with all its misplaced effort and its incredible, not to say, fiendish, cleverness.

It is a joy to find that there are some real sculptors there, after all—men of high ideals and artistic conscience. The great danger with even these is the malaria which surrounds them, that atmosphere of perilous facility which cannot withhold the hand, but embroiders and accentuates until every square inch of surface is tormented with a perfect eczema of detail. One who escapes this malady upon occasions is Signor Bistolfi of Turin, a great artist who has been called "the sculptor-poet of Death."

His relief, "Memories," and other funereal works are exquisite in suggestion. Now and then he falls from grace and elaborates the marble to destruction, but in his "Christ in the Wilderness," his "Garibaldi," and his nude "The Spirit of the Snowy Alps" (in memory of his friend Segantini), he divests himself entirely of the things that are petty, rising to a height of aloofness that few moderns ever attain.

There are others who show promise of emergence from the shadow of commercialism that has so long characterized Italian

sculpture. Believe me, we shall yet see new wonders from that land of eternal youth, that immemorial cradle of Beauty.

Perhaps one should apologize for including England in such a review, since our ancestral home is certainly not the nursery of sculpture and has never produced a great master of the chisel. Nevertheless, England shows an occasional sporadic work of considerable interest. Some of her painters, like Lord Leighton, were undoubtedly



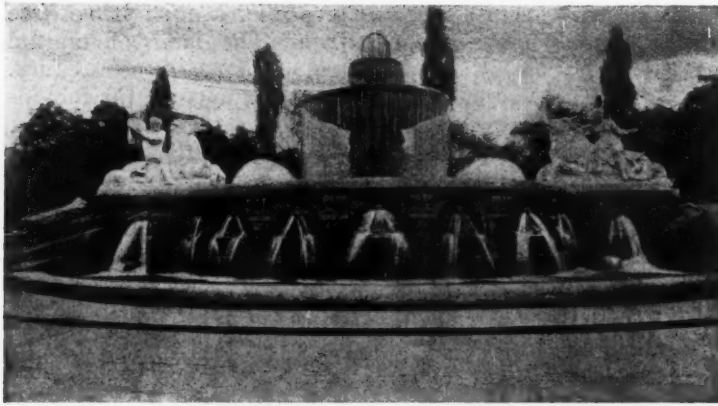
THE DANCER. RUDOLF MARCUSE, SCULPTOR

sculptors at heart, and ability is by no means rare. There is a form of artistic atavisms, however, to which her sculptors almost inevitably succumb sooner or later.

No matter how great the promise and the originality, they all come in time to work in the same way—unless, perchance, they die young, like gifted Harry Bates.

Thornycroft surrendered long since to this inscrutable fate. Even the colonists who come to the English shore seem destined to lose their originality and their skill. What is the explanation of this?

THE AMERICAN ARCHITECT



A PUBLIC FOUNTAIN, MUNICH

Henry James observes somewhere that if the English ever succeed in art, it will be by virtue of their love for overcoming difficulties. Industry counts; they delight in "taking pains," and too often their sculpture reveals little else. No man, for instance, could be more serious than Sir George Frampton, who has had many a sculptural idea; but the effect is frequently dissipated by his love of curious combinations of metals or stones, and his insistence upon ornamental detail. Of course, beautiful results are possible in such unions, as even modern art has shown; Dampf and Riviere, among many in Paris, and the young German, Emil Geiger, have produced charming works in chryselephantine and polychromatic sculpture. Max Klinger's extraordinary "Beethoven," on the other hand, seems to thwart its own purpose. The central idea is clouded by the clamorous appeal of many jarring elements. Of course one looks for no such exuberance in the products of an English studio, yet there is one remarkable exception, a very accomplished sculptor whose art has likewise become curiously perverted through too generous an admixture of the decorative crafts.

In the old Parisian schooldays we used to hear much of "Geelbert" as

they called the gifted young Englishman who had just left the Beaux-Arts and whose "Icarus" was pronounced by the *camarades* as good as they could do themselves. To-day Alfred Gilbert is one of the prominent figures in English art. His various public works, like the statue of Queen Victoria at Winchester, have been creditably done and have given him a great reputation.

However, a strange peculiarity revealed itself early in his art, which threatens to rob it of value. Perhaps at some time he may have visited Verona and been impressed by the tombs of the La Scala family. There, or somewhere, at any rate, he became fascinated with wrought-iron effects. They appear first as a little spray of volutes above the head of the Queen in the Winchester memorial, but develop rapidly in later productions into a veritable jungle of thorn-apples and chevaux-de-frise, which seem intended to confuse and belittle the essentially monumental features of his art. The disorder has recently attacked the statues themselves. His "Saint Michael" on the Clarence tomb at Windsor contemplates with helpless gaze an incredibly complicated sword,—a sort of Aaron's rod



A PUBLIC FOUNTAIN MUNICH

THE AMERICAN ARCHITECT

that budded—while the Saint's armor is so overwrought that it fairly peels off from the figure. A statuette of the Virgin is overgrown with vines and blossoms, through which its original beauty peeps out to tantalize us. The culmination is reached in his group of "Saint George and the Dragon."

When shall we sculptors learn that the greatest asset of our art is its hint of eternity? That look of serene permanence which is so dependent upon mass and simple contour, is what impresses one in the great works. It is not the feverish, gesticulating figure that is convincing. Is it not, rather, the quiet gesture of an Adams Memoriam, so still that it seems to move?

It is in Germany that we meet our greatest surprise. Germany, the hopelessly academic, the land of belated survivals, where centaurs still pursue Amazons, and satyrs follow nymphs in deadly sequence; where the official sculptors of today have been led by such masters of ornate grandiloquence as Reinhardt Begas, with his spectacular monument to William I, "surrounded by floating victories, roaring lions, standards, cannon, and chariots"; and Rudolf Siemering, whose "Bismarck" at Frankfort leads Germania's fiery steed with one hand and grasps his sword with the other, while the enemies of the Vaterland are personified by a crawly dragon to be trampled under foot from time to time.

With vague, unhappy memories of similar monuments glimpsed throughout Germany and particularly abundant in Berlin, one is amazed to discover that the most interesting works of sculpture and architecture now being produced in Europe are to be found in the growing cities of that land. There is a saying that "When things become as bad as they can, something has got to happen." The something has happened in Germany, and these pretentious allegories are giving way before the thoughtful work of a younger generation who have

in mind first of all the reasonable use of the medium concerned; who treat stone as stone and bronze as bronze, producing delightful results with an astonishing economy of means.

Most remarkable, perhaps, of these men is Hugo Lederer, whose Bismarck Memorial at Hamburg—a suggestion of the protecting Roland statues of many German cities—is one of the truly great monuments of these later times. An armored figure of colossal size standing guard upon the hill-top and supported by massive architecture of which it forms a part, this statue is impressive beyond words because it was "conceived big," instead of being an ordi-



LE DECLIN

nary portrait enlarged. Professor Cuno Franke of Harvard University says of it: "The whole structure appears almost as the result of the upbuilding forces of Nature herself. Power in calm repose—that is the impression which forces itself irresistibly upon the spectator."

One of the most interesting of recent combinations of sculpture and architecture is found in that extraordinary restaurant of Berlin called Rheingold Haus, where Professor Franz Metzner has produced a series of weird and strikingly original effects, using the human figure as others employ plant forms; conventionalizing the body, amplifying it and now and then compressing it into unwonted spaces, but always with a pattern so essentially decorative and a touch so sure that one is compelled

THE AMERICAN ARCHITECT

to recognize his authority. He is master here, and these are his creatures, to obey. Arbitrary and whimsical uses of the figure which might easily lead to eccentricities in other hands or in other places, seem admirably suited to this pleasure-resort, where monstrous heads peer out from shadowy corners, brawny giants uphold the fantastic masonry of the halos and lithe-limbed Rhine maidens gleam through billows of tobacco smoke. Yet with all this prodigality of invention, this bewildering versatility and power, there is no effect of lawlessness, or of riotous excess. Bronze and stone and wooden panels are treated according to the demands of the materials and the severe requirements of sculpture. The directness and the thrift of means here shown, the almost austerity of design, contribute to a result which is legitimately sculptural.

To mention just one more instance among many—the old-time city of Düsseldorf, associated in most of our minds with an extinct school of romantic painting, offers us today one of the finest examples of modern architecture and sculpture blended in happy union. It is only a department store, called the Haus Tietz, but its design is most admirable. Our own architects, as a rule, seem possessed of a desire to minimize the height of their lofty structures by stratifying them, cutting their façades with as many horizontal stripes or ruffles as possible. In the building under consideration the designer has frankly acknowledged its height, and, with a perfectly practicable plan, has developed an effect of soaring which is truly an inspiration. Its ranks of graceful piers suggest a great pipe organ. Its sculptural adornments are not the casual groups and figures that are set upon shelves on our façades, but are like an efflorescence of its rough stones, sparing in number, but holding just the right proportion to its restful surfaces. Like the design as a whole, they are organic, growing out of the very structure itself. An appreciative traveler remarked of this building, "Its treatment seems to have been dictated by the stone that it is made of; respecting its material, it is exalted by it."

Such work as this, so new, so independent, and so delightful, recalls the dictum of Mauclair that one should be as con-

cerned in *how* he is going to do a thing as in *what* he is to do; in other words, that the treatment merits no less thought than the subject itself. This is a consideration which we Americans are disposed to overlook.

Of Professor Metzner's remarkable pupil, that untamed young Dalmatian, Ivan Mestrovic, one scarcely knows how to speak. This youth of twenty-five seems to be obsessed by the creative impulse and toils furiously to give expression to his teeming fancies. He keeps all artistic Europe wondering what he will do next. One might say of him, as was said of Balzac, "He is not a man, but one of the forces of Nature." His output gives one this feeling not only



RENARDS DU SAHARA.
EMILE PERRAULT-HARRY, SCULPTOR

because of its prodigal abundance, but by reason of its contrasts. He produces indifferently beauty and bestiality. These swarming children of his are often weird beyond description, but they are always conceived as sculpture and treated in a big, elemental way. "Treated" seems hardly the word; they have no look of submission to treatment, but seem to have evolved themselves out of the rock, like the children of Deucalion and Pyrrha. Some still struggle and clamor for release. They strain their giant limbs and frown like demons. Yet others have the serenity of the ages on their placid brows.

The handsome youth who has called them into existence,—he of the dark mane and the flashing eyes—is pronounced by Rodin to be the most extraordinary of living sculptors. I can understand the sympathy; Mestrovic's creations seem to have passed through Rodin's "Gates of Hell."

A BLACK WALNUT SUBSTITUTE OF ARGENTINA

NOGAL, nogal silvestre and wild walnut are trade names of an important timber tree of Argentina, which is closely related to, and resembles, our black walnut. Its botanical name is *Juglans australis* of the walnut family. The botanical range of this tree extends from southern Mexico southward into Colombia, Peru, Ecuador, Argentina, and northern Chili. It is in no place very abundant, but has been cultivated throughout Central and South America from a very early period and is highly esteemed on account of its valuable wood. It has been planted extensively and grows now very abundantly in the provinces of Salta, Jujuy, and Tucuman of northern Argentina, where the conditions are especially suited to this tree. Some of the other provinces of Argentina have walnut plantations, but not in such large commercial quantities.

The tree attains a height of about seventy feet, although generally not over fifty to sixty feet, and a diameter at the base of from twenty-five to forty inches. Good straight logs from twelve to eighteen feet long and from twelve to twenty-four inches square, or in exceptional cases, as much as thirty inches square, are brought to the large markets in Buenos Aires. About 2,000 logs, which average about 300 board feet, are sold in this market annually. The price of the wood in the form of logs varies from ten to fourteen cents per board feet, while the sawed lumber ranges from sixteen to twenty cents per foot. Both logs and sawed lumber are measured in the large markets by experienced scalers. These scalers are not government officials nor do they receive official recognition, except that their measurements are accepted by the custom house officers. They must have a license from the government, but it grants them no authority, except to conduct a private business. Their fee is one per cent. of the selling price. They are employed to measure all lumber and logs sold, making discounts for defects, such as cracks, rough edges, bad hearts, knots, sappy conditions, damage by sea water, etc. These discounts are sometimes very heavy,

and it is not an unusual thing for buyers or sellers to furnish their own scalers.

These scalers also measure and pass upon all imported woods. If there is a defect in the log or board, affecting, for instance, from one to four inches wide and from two to four feet long, a reduction is made for its entire length for the greatest width of the defect regardless of the length of the piece or the condition of the log or board below the defect. This rule is applied to all woods sold in the large timber markets in Argentina, and it is greatly to the advantage of the buyer, who derives considerable profit from the wood which the scaler deducts as defective.

A good many of the walnut logs are more or less defective at the center, which results in considerable loss, not only as a result of the scaler's custom of rejecting liberally for cull, but because of the wasteful method of cutting and sawing. All the logs are hewn square in the forest, so as to save freight in transporting them to market and to adapt them to the sawmills, which seldom use round logs. The sawmills in Argentina are not generally adapted to sawing round logs. If the logs were sent to the mills round the waste would be materially reduced.

Two great difficulties stand in the way of exploiting Argentina walnut, both of which are gradually being overcome. One is the difficulty experienced in drying the wood sufficiently for use in cabinet and construction work. The other is the excessive cost of transportation of the timber to market under the present conditions. It is necessary to find a process for speedily seasoning it without affecting the quality of the wood. Railroad companies are now installing plants which are being successfully operated, but they are not as yet in general use.

At present all walnut is brought to Buenos Aires in the green state, being shipped as soon as possible after it is cut. In this condition it weighs about eighty pounds per cubic foot. The freight on this wood from the place where it is cut to Buenos Aires is thus quite considerable, because it weighs only about fifty-two pounds per cubic foot when dry. If the wood were seasoned in the forest the local consumption would be increased three or

THE AMERICAN ARCHITECT

four fold, because it would be in great demand for furniture, mouldings, house finishing, etc. Moreover, it is naturally much more difficult to sell it green than dry, because the cabinet maker or any other buyer of wood who uses walnut wood, does not wish to hold it from one to three years until it is thoroughly seasoned. This he must do under present conditions. Occasionally the wood is worked up into furniture before it is thoroughly dry, and the result is that it often warps and shrinks. When it is properly treated, Argentina walnut is as good, if not better, than our black walnut, for it is easily worked and makes beautiful furniture.

Large quantities of this walnut are available in Argentina within reach of railroads for about one cent per square foot, including the cost of squaring the logs. Labor is also comparatively cheap in the timber regions. The price of walnut logs at the railroad is from three to six cents per square foot green. There is no reason why this wood should not be profitably exploited if it were put on the market in proper condition. Second-rate black walnut boards, usually seven to eight inches wide, sometimes as much as fifteen inches wide, and only six to ten or twelve feet long, have been sold in Argentina for twenty cents per square foot, wholesale, and at retail for twenty-two to twenty-three cents. It is generally admitted that our black walnut is somewhat better than that produced in South America, but the difference in quality is not so great as the difference in price. With proper methods of cutting and handling, the wood of the South American species could be put on the market here at less than a good deal of our best grades of native walnut.

WIND PRESSURE ON BUILDINGS

THE subject of wind pressure continues to receive careful study from scientists in Europe and America; and as the limitations of each experiment become apparent fresh ones are undertaken to approximate more nearly to actual practical conditions and so give

results that will accord more nearly with facts. The latest to hand are the work of Mr. Albert Smith, a member of the Western Society of Engineers, who has been experimenting with a model building, offering a variety of conditions. In length there were two sections, one five feet, the other ten feet, so that records were obtained giving three results, one for each sectional length and one for the combined length of fifteen feet. The width was uniformly six feet. The heights, excluding roof, four feet, five feet and six feet respectively. The roofs were in three slopes, viz., 1:3, 1:4 and 1:5. To represent fairly natural exposed conditions, such as rule in the case of a large isolated mill building, the model was placed near the north edge of a large level field; the nearest fence to the south was about 500 yards distant, the nearest trees were half a mile away and the nearest hill about two miles away rising to a height of about fifty yards. The building was constructed of light planks with a small door at each end. It was found that with one side normal to the wind the lee side and both ends are under suction. It was also found that the unit horizontal pressure, generally, proved to be higher on the higher models and also on the models of greater length, and the same law applied to the vertical effect on the roofs. The increase of height of wall tends to decrease relatively the average amount of pressure on the windward wall; the decrease of wall height, while the roof height remains unchanged, tends to produce pressure on the windward roof. The increase of height tends to increase relatively the average amount of suction on the leeward wall; and where the roof is long in comparison with the height, or, the span being constant, where the height is small in comparison with the span, the leeward suctions will be relatively small. For the case of roof trusses on masonry walls a suction effect in the neighborhood of 0.4 of the unit wind pressure should be placed on the leeward roof of all closed buildings. The necessity for secure anchorage, not only to prevent sliding, but to prevent actual uplift, is strongly confirmed by the tests.—*Exchange*.

THE AMERICAN ARCHITECT

THE AMERICAN ARCHITECT

Founded 1876

PUBLISHED EVERY WEDNESDAY BY
THE AMERICAN ARCHITECT (INC.)

No. 50 Union Square, New York
(Fourth Avenue and 17th Street)

G. E. SLY, PRESIDENT

E. J. ROSENCRANS, SECRETARY AND TREASURER

Address all communications to "THE AMERICAN ARCHITECT"

SUBSCRIBERS' RATES:

In the United States and Possessions (Porto Rico, Hawaii
Philippine Islands and Canal Zone),
Mexico and Cuba

TEN DOLLARS PER YEAR, POSTAGE PAID
ALL OTHER COUNTRIES.....\$12.00 PER YEAR
SINGLE COPIES (Regular Issues), 25 CENTS

CHICAGO OFFICE, Hearst Building
Page A. Robinson, Western Manager

Entered at the Post-office, New York, as Second-class Matter

VOL. CIV

JULY 2, 1913

No. 1958

THE ASSUMING OF PROFESSIONAL PREROGATIVES BY LAYMEN

THE repudiation of Mr. Guy Lowell's design for the New York County Courthouse by the Supreme Court Justices is a startling example of the too popular attitude toward the profession. The competition for the new Courthouse was conducted by an expert adviser under the rules of the Institute. The Jury of Award composed of three of the most eminent architects in the country recommended Mr. Lowell's design to the Courthouse Board as fulfilling "to an unusual degree the exacting conditions of the programme," and promising "a monument in every way worthy of the City of New York."

And now after brief consideration four requirements are laid down by the committee of justices as essential, in addition to dignity of exterior and architecture typical of the high purposes of the courts. These requirements are:

That the building shall not involve unreasonable expense to the city.

That it shall have adequate facilities for light and ventilation.

That it shall be adapted to the needs of a Courthouse and that its construction shall be such as to make it generally convenient for this purpose.

That it shall be so constructed as to permit of extension to meet future needs, if they arise, without necessitating a present construction beyond the needs of the immediate future.

The Justices declare "the proposed circular plan does not meet any of these requirements and *cannot be so altered as to meet them.*" The italics are our own. If the honorable Justices of the Supreme Court handed down an interpretation of a statutory law we would accept it with unquestioning respect, however much we might disapprove the circumstances which made such an interpretation necessary. For the most part, the objections of the Justices to Mr. Lowell's design are on matters of purely technical character. They have made a specially strong attack on the method of lighting the court rooms, claiming that they should be lighted on not less than two sides. Whether or not their opinion in this matter is correct, it is at least entitled to respect because, fortunately, no architect has spent as much time in a court room as have the justices. And, yet if any of them has been displeased with a room lighted from only one side, it was probably an exceptional example, or one which was not designed according to the best modern knowledge and experience. As our readers are generally aware, rooms for deliberative assemblies, including school-rooms, are, in best modern practice frequently, if not usually, lighted from one side only. The window areas are scientifically determined, and the system has proven eminently satisfactory.

Turning to the question of ventilation, the Justices admit that artificial ventilation must be used but believe that direct communication with the open air is most desirable. We respectfully call to the attention of the Justices the fact that some systems of ventilation are dependent for their maximum efficiency on the non-interference of natural drafts. To supplement such a system by opened windows is equivalent to encasing the modern soldier in mail.

As to the construction of extensions to meet possible future needs, it is claimed that the available portion of the entire site assigned for the courthouse must be utilized for present needs no matter what

THE AMERICAN ARCHITECT

style of structure may be adopted, yet the Justices have urged this reason, if it can be called such, as an argument against the circular plans.

Mr. Lowell is quoted as saying:

"Really all the points brought up are matters of opinion. In developing my plan I considered every one of them, and if I have come to a different view of them from that entertained by the Justices it does not mean that I cannot modify my plan to meet their ideas."

Surely no attitude on Mr. Lowell's part could be more conciliatory. Whether it is entirely just to himself and to the profession, thus in the face of laymen's criticism, to retreat from the standard of professional conviction, when designing a public monument, may fairly be doubted.

There is a hospital of high standing in this country, which to avoid legal responsibility for the results of its surgical operations, performed on the advice of highest authority, requires from each patient a written release from such responsibility. If Mr. Lowell is obliged to retract from his authoritative position, it would seem quite reasonable that New York County should file a bond releasing him from moral and professional responsibility in the matter.

There are some natures that seem to delight in opposing conventions and contradicting generally accepted authority. Little Ibsens and Bernard Shaws are "ever with us." Just why, after stating in detail their objections to the design, the Justices should declare, as quoted, that the circular plan "cannot be so altered as to meet any of them," is not clear, and seems a trifle dogmatic, especially as Mr. Lowell is his own authority for stating that it can be so altered. Yet by this we intend no disre-

spect to the gentlemen who, as American citizens, have a right to express an opinion on any subject whatever, and as Justices of the Supreme Court merely exercised their legal power of veto and thus brought to a standstill at least temporarily, the promotion of a great public work. Rather we say it in tears, as being a condition which is constantly calling into question the authority of a calling which we fondly believe is a profession.

In a Florida city council recently a measure was proposed providing that all buildings costing more than a stated amount should be designed by an architect or engineer. The bill was killed because some councilmen stated, "that most anyone could draw plans that were good enough to put up the average building as well as any architect."

Compared with law and medicine, our profession, as such, is new and lacks the prestige of hoary age. In the comparatively few years which have followed its inception, we have progressed much faster than did the older professions, but it is not enough; the two instances which we have cited are typical of conditions existing too generally all over the country—conditions of ignorance and mistrust.

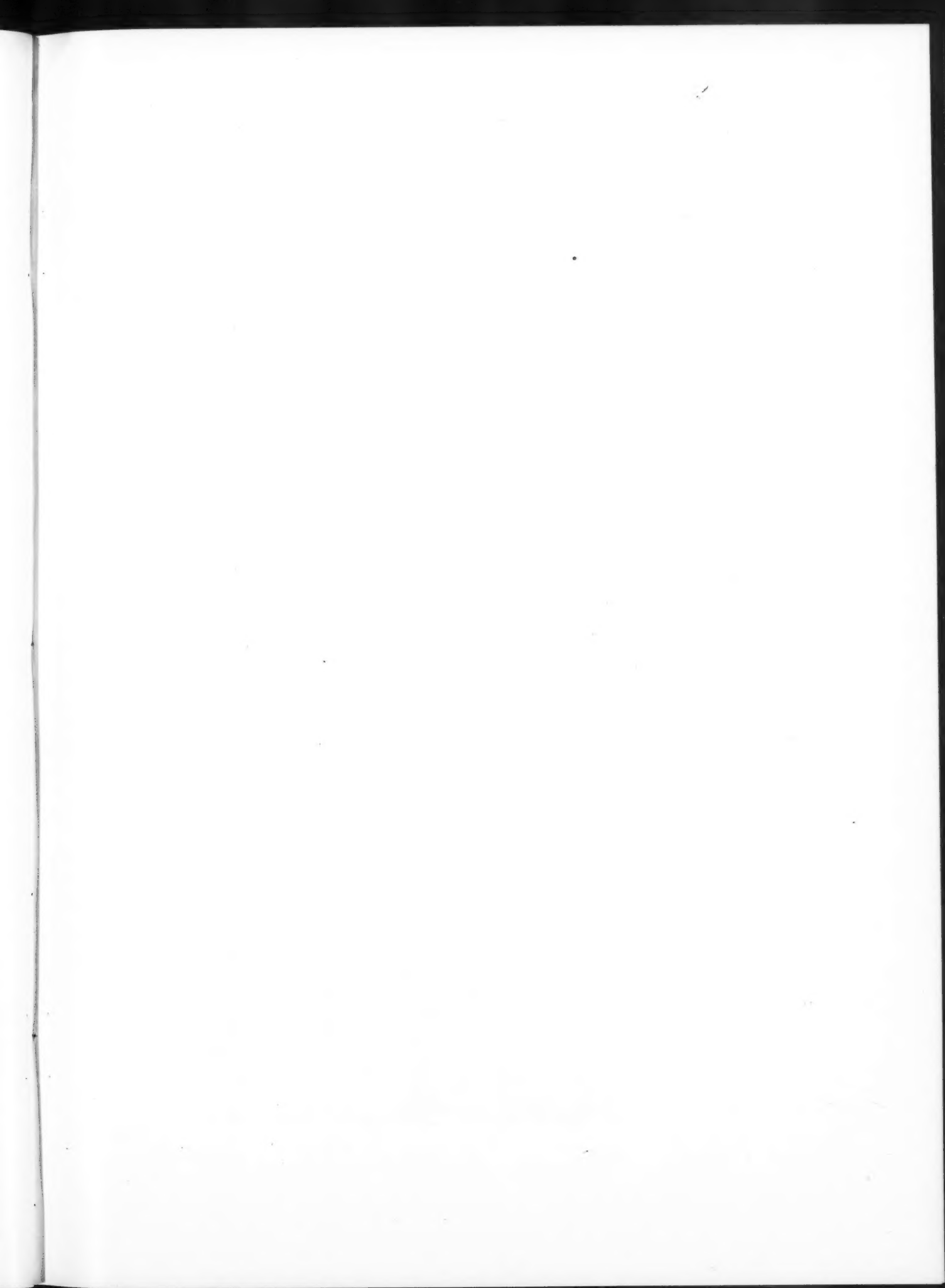
Our first duty in the matter of the public's education is the thorough technical education of the profession itself; the second is legislation, as nearly uniform as possible through the country, regulating the practice of architecture; the third duty is adherence to the best known professional practice even in the face of popular criticism, an adherence as firm as that of a skilled physician who will merely administer a dose of medicine, though the patient is sure his condition demands an immediate operation of major character.

A RECENT LEGAL DECISION AGREEMENT TO TAKE COMPENSATION IN PROPERTY

An architect sued under the common counts upon a mechanics' lien for his services. There was a contract to pay five per cent. of the total cost of the work in land lots to be selected by the architect, and to be taken at schedule prices and upon the terms already adopted by the owner.

It was held that this was a contract to pay, not money, but a specific thing, and, in case of performance and non-payment, the measure of damages was the actual reasonable value of the lots. The contract itself was not admissible in evidence under the common counts to fix the price stipulated.

Osterling v. Cape May Hotel Co., New Jersey Court of Errors and Appeals, 83 Atl. 887.





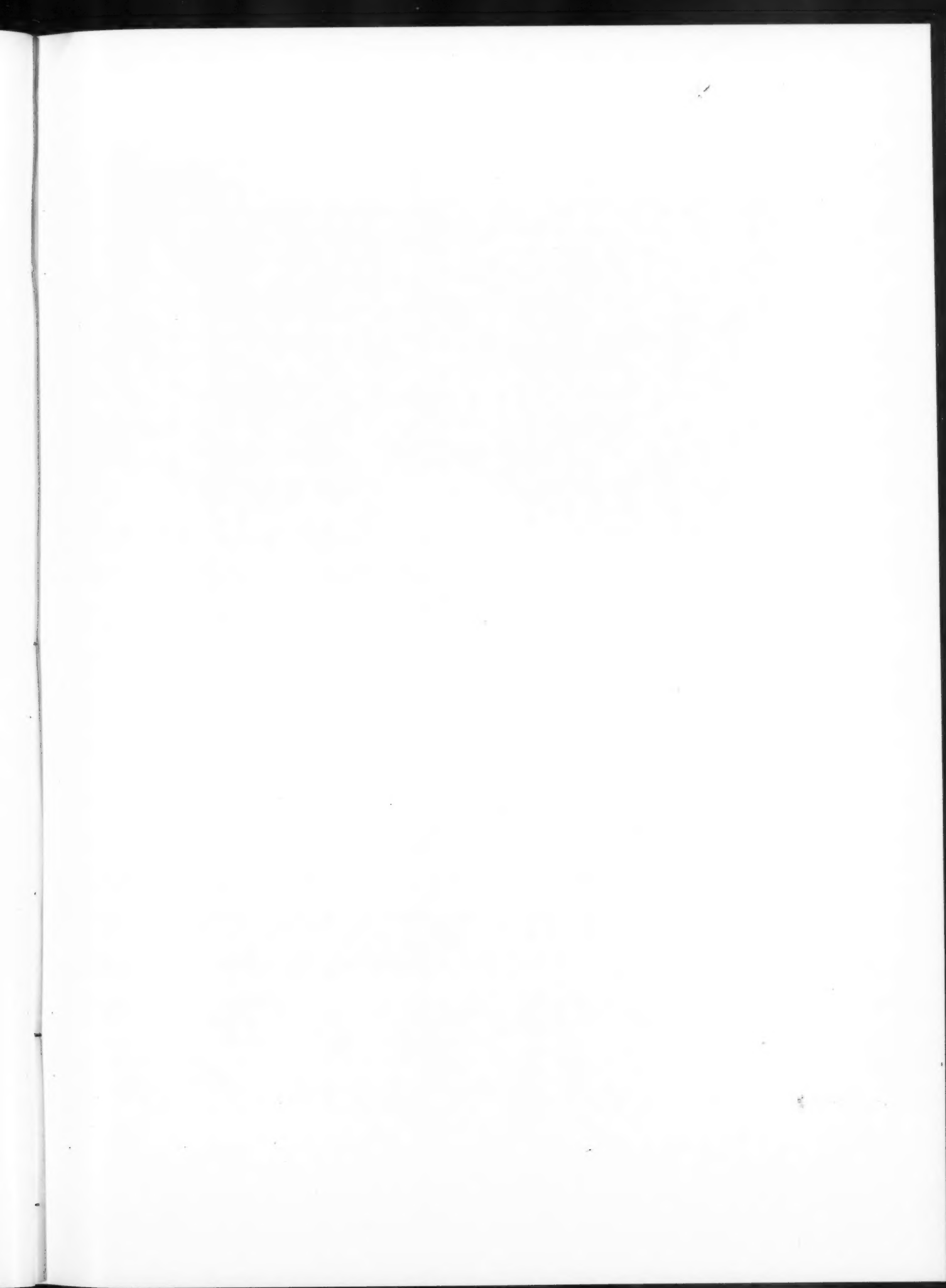
MONUMENT TO CLAUDE LORRAIN

AUGUSTE RODIN, SCULPTOR



THE SEASONS

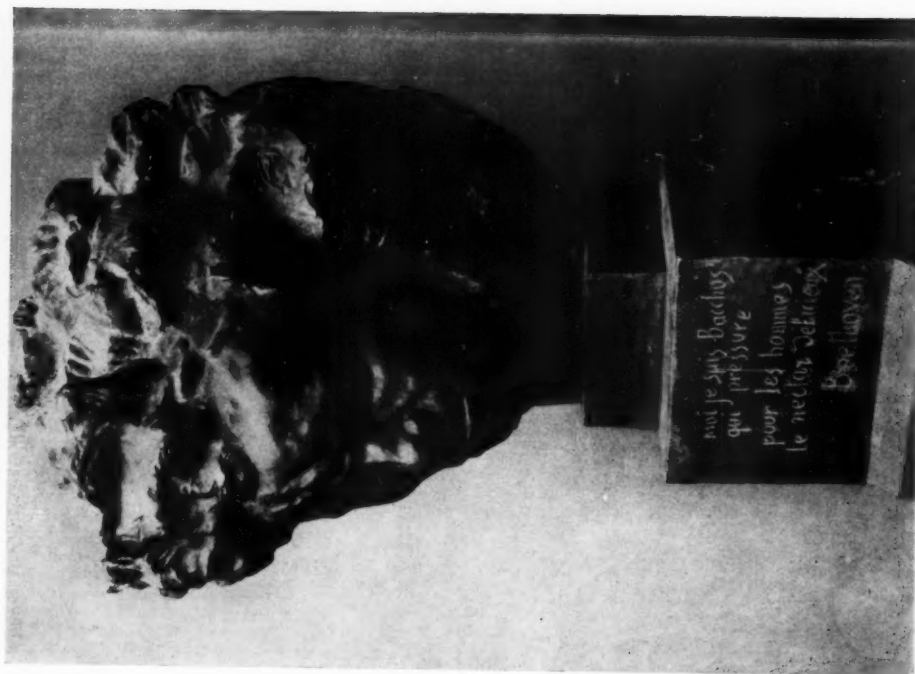
AUGUSTE RODIN, SCULPTOR





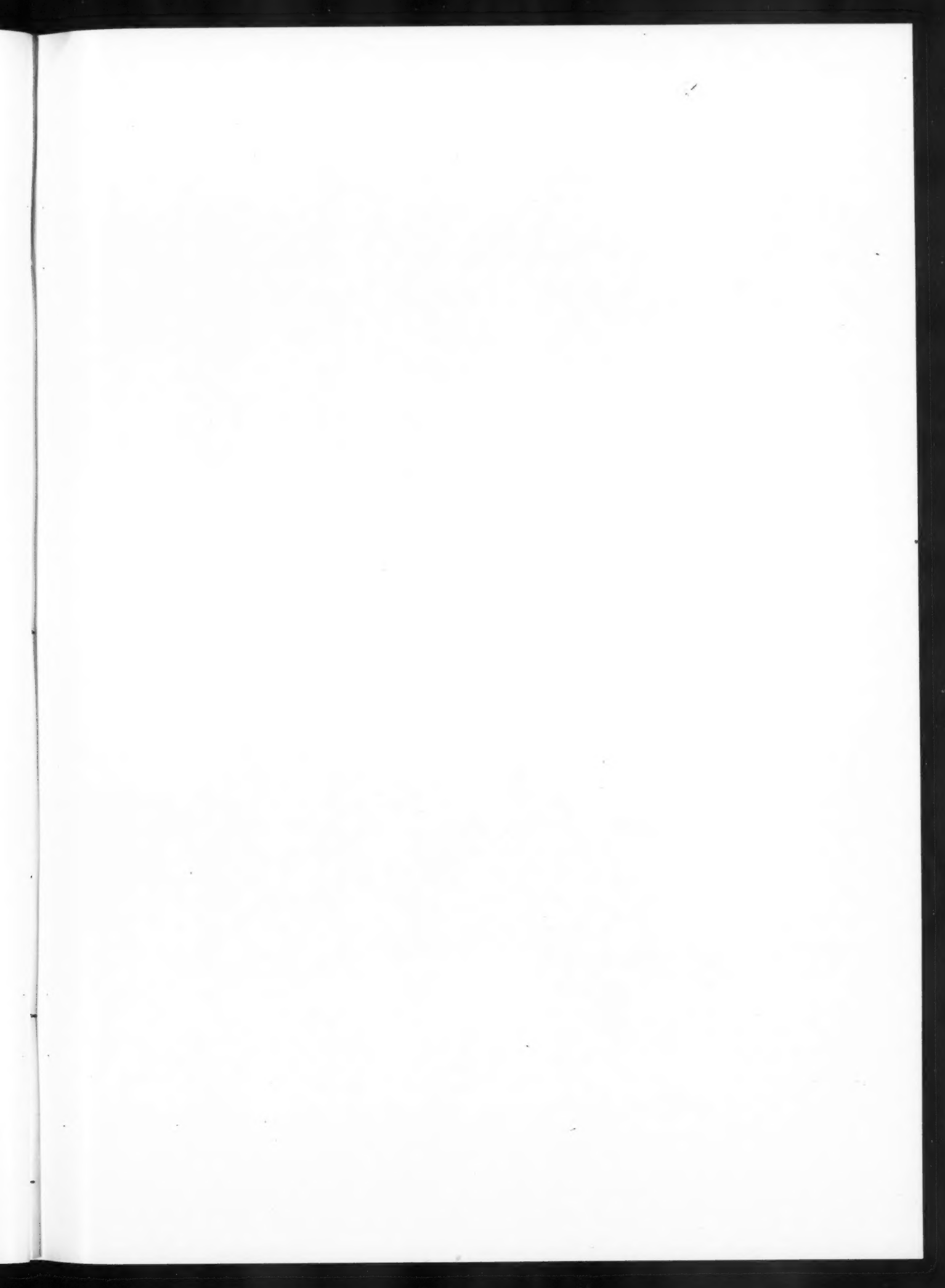
LE FROID, LUXEMBOURG MUSEUM

ROGER BLOCH, SCULPTOR



BEETHOVEN, LUXEMBOURG MUSEUM

EMILE BOURDELLE, SCULPTOR



THE AMERICAN ARCHITECT

VOL. CIV, NO. 1958

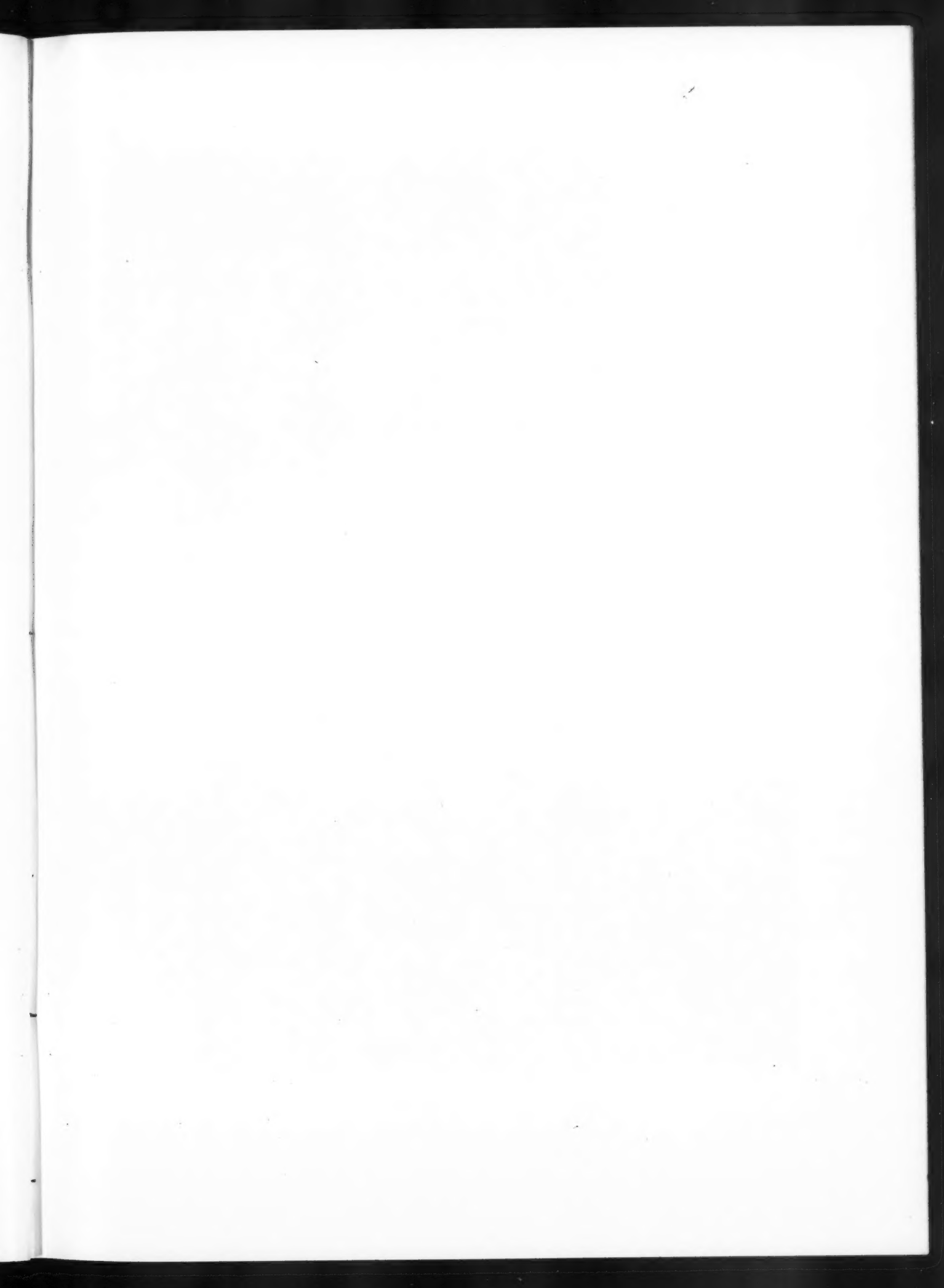
JULY 2, 1913



L'ENFANT
ROGER BLOCH, *SCULPTOR*

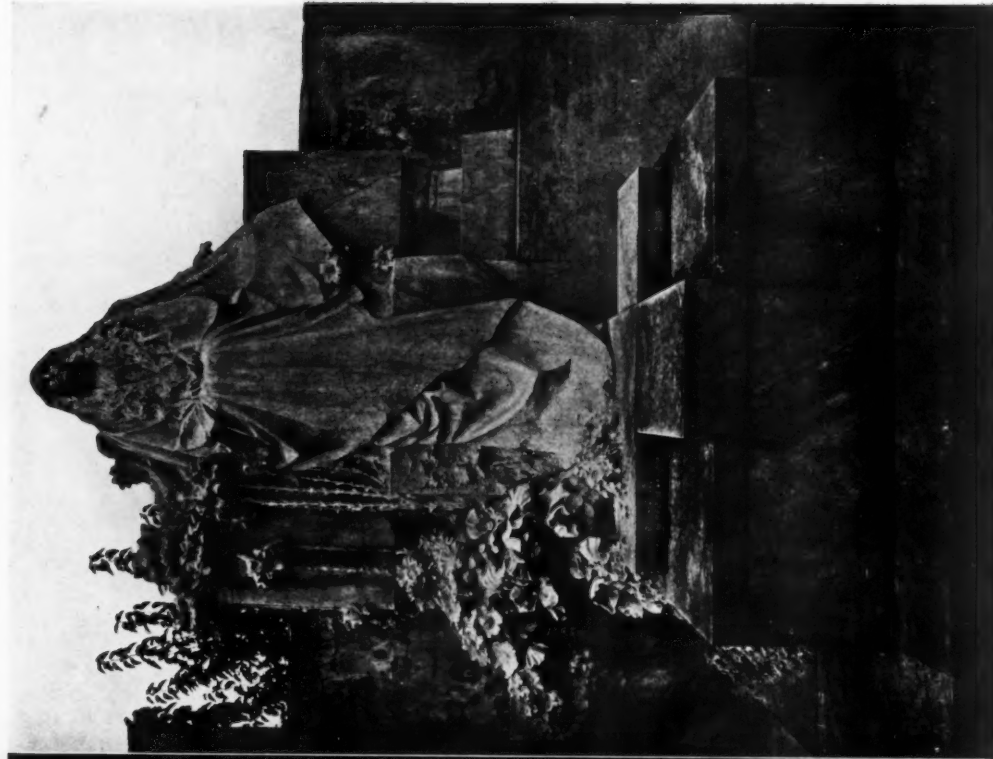


LA MISÈRE
M. WALGREN, *SCULPTOR*

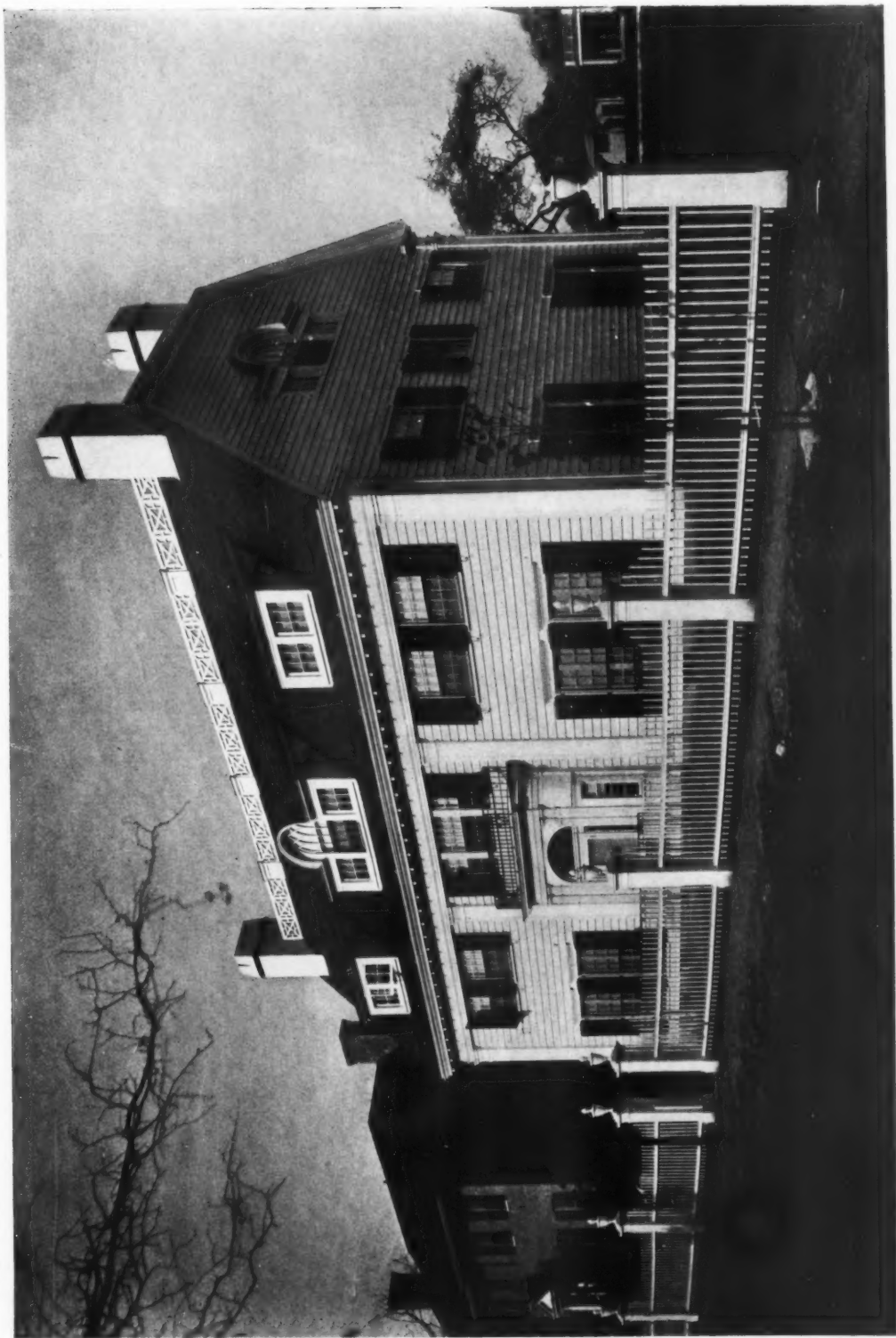




MONUMENT TO RABELAIS, MONTPELIER
J. VILLENEUVE, *SCULPTOR*

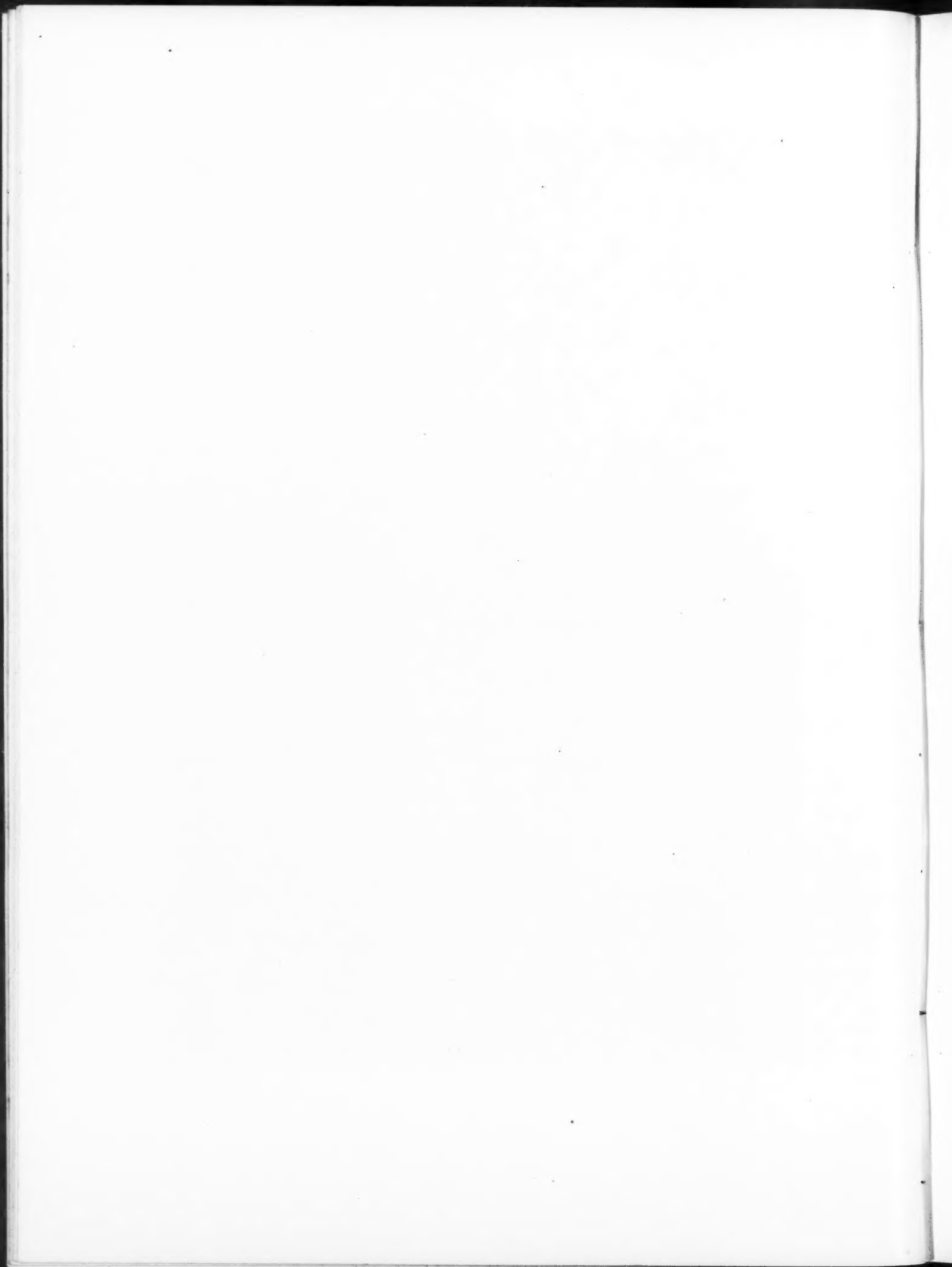


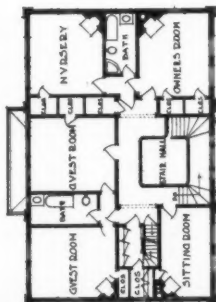
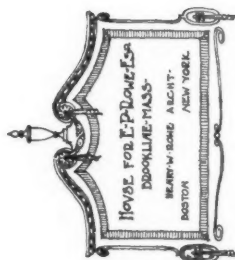
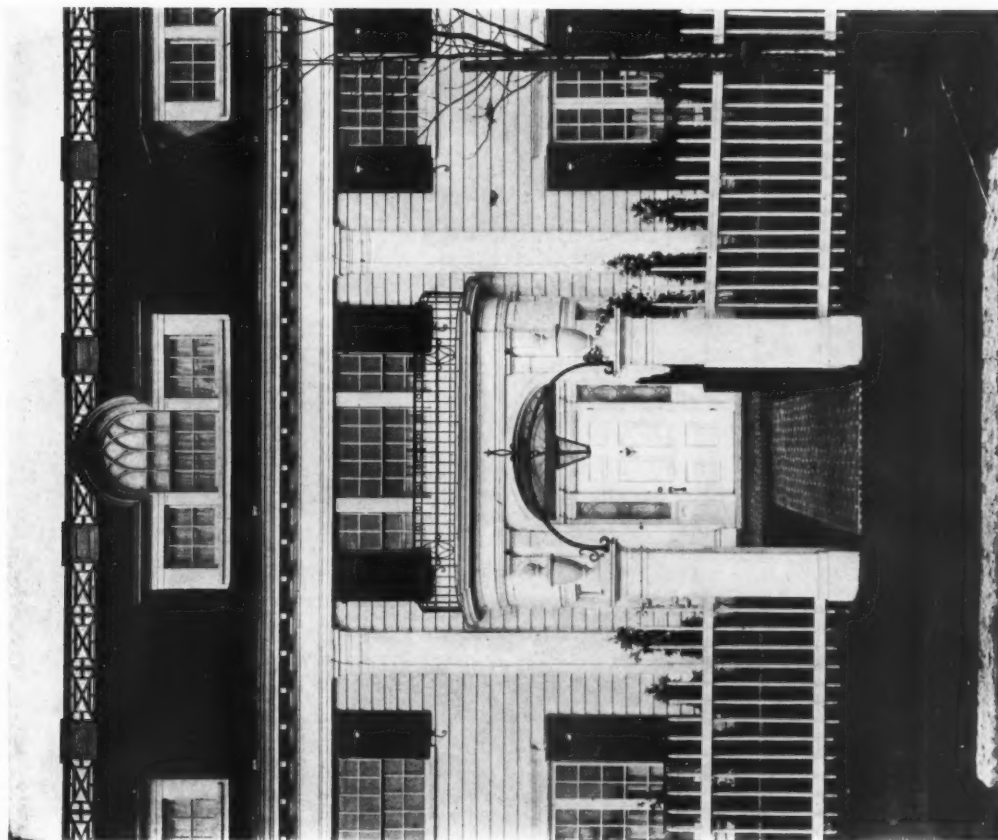
THE SPHYNX
M. BISTOLLI, *SCULPTOR*



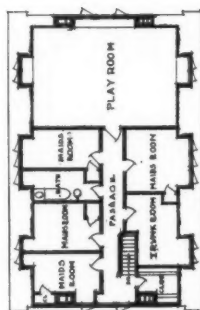
HOUSE OF E. P. ROWE, ESQ., BROOKLINE, MASS.

MR. HENRY W. ROWE, ARCHITECT

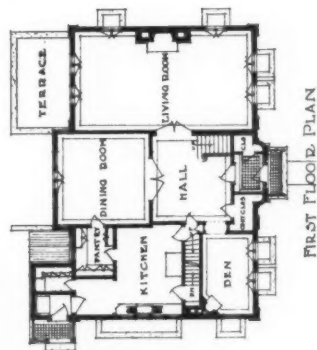




SECOND FLOOR PLAN

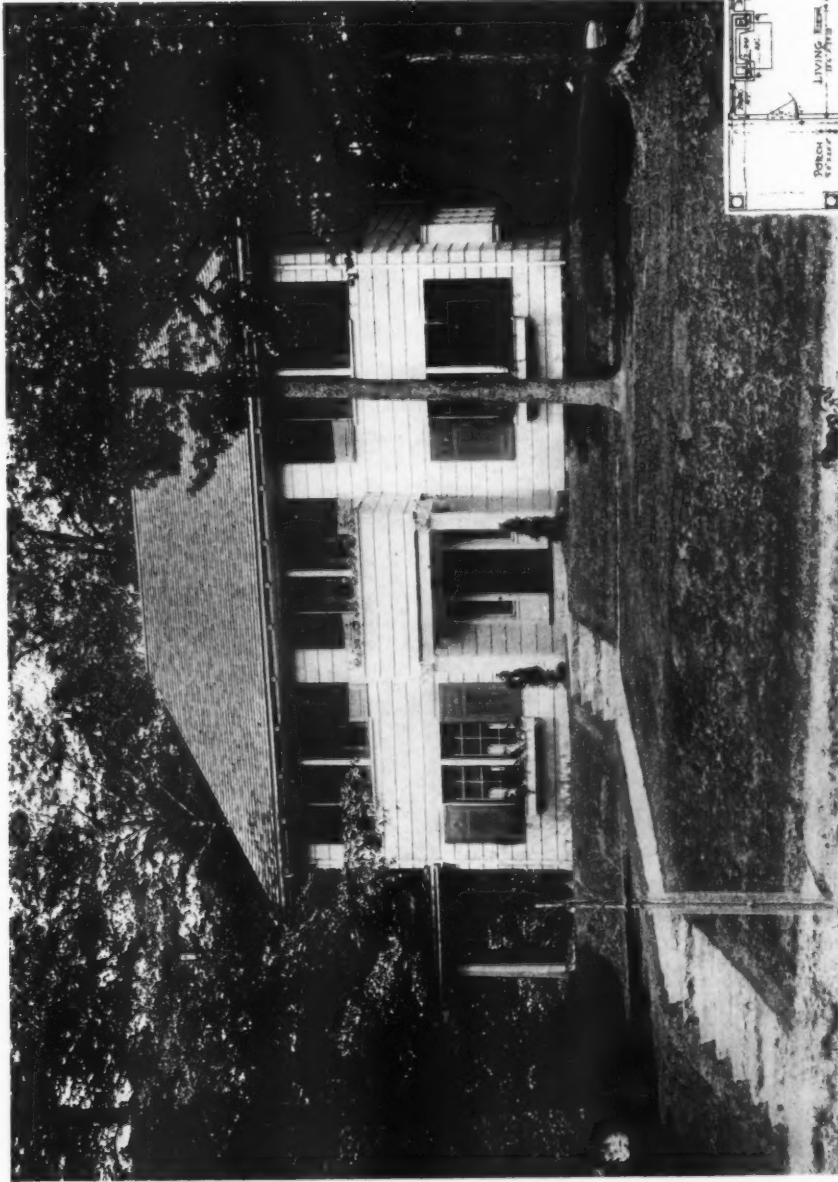


ATTIC PLAN

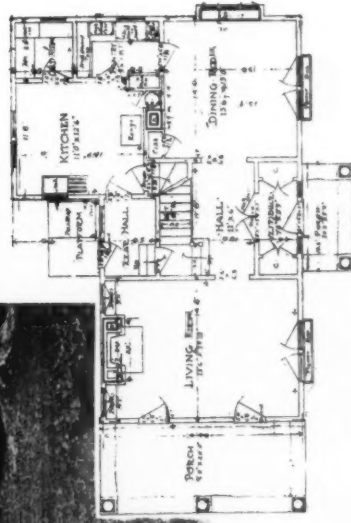


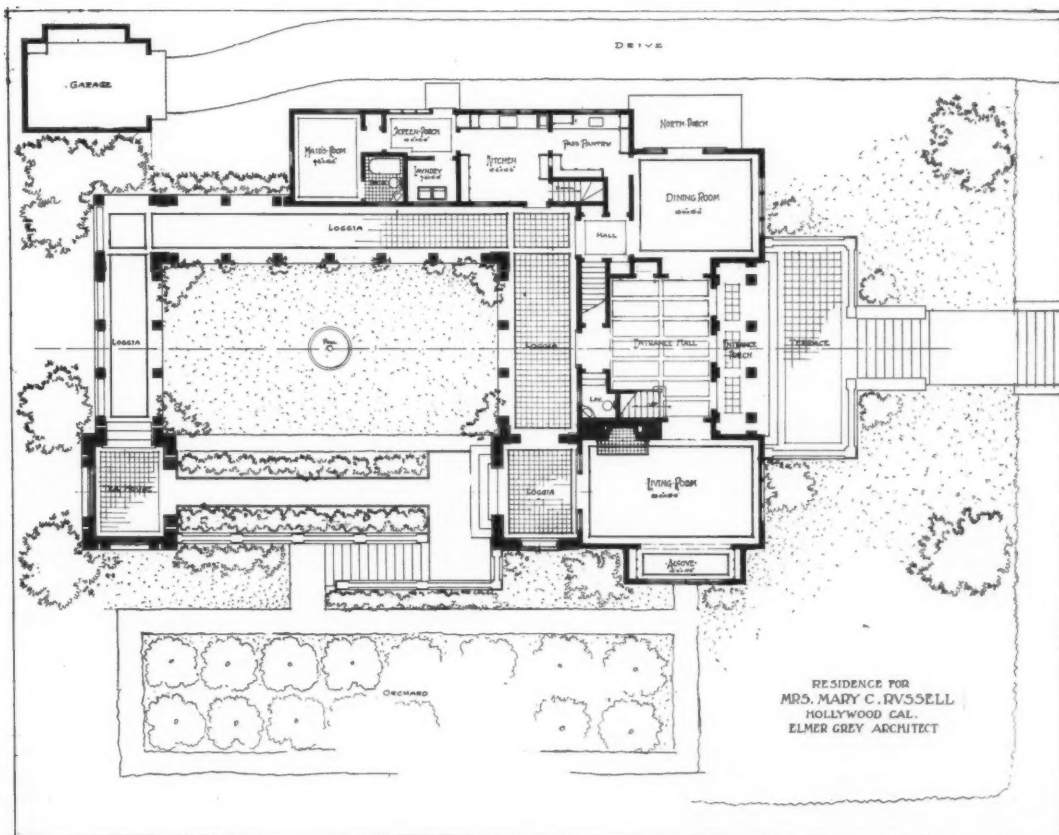
FIRST FLOOR PLAN

HOUSE OF E. P. ROWE, ESQ., BROOKLINE, MASS.
MR. HENRY W. ROWE, ARCHITECT



HOUSE OF THOMAS R. YOUNG, ESQ., CHESTNUT HILL, MASS.
MR. FRANK CHOUTEAU BROWN, ARCHITECT





HOUSE FOR MRS. MARY C. RUSSELL, HOLLYWOOD, CAL.

MR. ELMER GREY, ARCHITECT

CURRENT NEWS AND COMMENT

IOWA STATE CAPITOL EXTENSION

Purchase of ground for the Iowa capitol extension at Des Moines, as planned by E. L. Masqueray, a St. Paul architect, has been commenced by the Iowa executive council, and it is expected that within a year all the land will have been bought and the improvement well under way.

The purchase of the ground is but the beginning of an elaborate plan for improvement outlined by Mr. Masqueray. He was retained to devise a location for the \$50,000 memorial to the late Senator Allison, which is now being made in New York City by Evalyn B. Longman. He could find no suitable location within the narrow confines of the land now owned by the state and suggested an enlargement, taking into consideration the present buildings and those which needs must be constructed within the next quarter of a century. This plan was seized upon by the Legislature as good for future improvements, was adopted and a tax authorized for the purchase of the land, estimated to be about \$2,000,000.—*St. Paul Pioneer Press*.

PROPOSED CITY FOR WORLD'S CENTER

Hendrik Christian Anderson, the Norwegian-American sculptor, of Newport, R. I., presented to King Victor Emmanuel of Italy during a private audience recently the results of his nine years' labor on the project of the establishment of a world center for international interests.

The king displayed much interest in the scheme, since one of the sites proposed for the new international city, which it is suggested shall be capable of housing 1,000,000 inhabitants, is in Tripoli. America has also been mentioned in this connection.

It has been suggested here that this project might be developed in co-operation with Secretary of State Bryan's peace propaganda, in which it is proposed that differences between any two nations shall be submitted to a commission appointed by both, which shall investigate the controversy and make findings of fact without attempting to pass on the merits of the case. It is pointed out that besides Italy, nine other nations have responded favorably to Secretary Bryan's suggestion.—*Exchange*.

LINCOLN MEMORIAL APPROVED

The commission having charge of the Lincoln memorial at Washington is said to have finally approved the plans for the memorial drawn by

Henry Bacon and certified them to the Secretary of War to advertise for bids. No decision was reached as to the choice of a sculptor of the Lincoln statue.

FINDS RUINS OF TOWER OF BABEL

Archæologists here have been stirred by the remarkable report laid before the Academy of Inscriptions Belles-Lettres this week by the Abbé Henri de Genouillac, who has just returned from the excavations at Babylonia and believes that he has found the original of the biblical Tower of Babel.

The Abbé de Genouillac was sent out by the French Institute on a mission of research to El Ahmer, about 80 miles south of Bagdad and a short distance from Euphrates. Here he laid bare the remains of the primeval city of Kiss, one of the earliest capitals of Babylonia, far older than Babylon itself, and uncovered an immense palace similar to the early royal buildings discovered elsewhere in that country.

In the middle of the great court yard of the palace were the ruins of an immensely high tower named "The Temple of the Foundation of Heaven and Earth," and sacred to the national god, Zamama.

This temple with its strange name is, thinks the Abbé de Genouillac, the original of the biblical legend of the tower which should reach from earth to heaven. Statuettes and vases were found among the ruins showing that the latter were not later than the reign of Hammurabi (2100 B.C.).

The abbé's discovery is thought very important by biblical critics also.—*Boston Herald*.

BUILDING FOR BUILDERS

A plan is being discussed in Philadelphia to erect a building specially designed for the use of designers and builders. Such a structure will contain suites of offices and draughting rooms for architects and engineers, estimating rooms and business offices for builders and allied trades, studios for interior decorators and apartments, and studios for illustrators and artists.

The plan to combine all these allied interests in a well appointed, modern office building, which is especially designed to meet the varied and necessary requirements, is a natural evolution. In the grouping of interests and professions which are of a similar character this country is far behind Europe, and the proposed building would be an example for other great cities of America.

THE AMERICAN ARCHITECT

THE SPIRIT OF CRAFTSMANSHIP

Mr. H. Wilson, the well known English craftsman, through whose efforts craftsmanship has been very materially elevated, has recently delivered an important lecture "On Workmanship," in which he stated:

"All great art is racial. The workman is nothing but the means of expression, the willing tool of an unknown power. To this power each must dedicate himself, desiring no other reward than to be employed. There is no room for self, and no true workmanship possible until that has been utterly done away. Yet, after all, in this abandonment of self there is no loss, but a great gain. Who does not know the exquisite happiness when, after a long wrestle with some problem, the difficulty ceases, the right idea comes, and the work is done? That one idea makes all worth while. It was what you wanted; it was given to you; yet you cannot claim it for your own. Out of the back of the beyond it came to you, because for a moment in desperate difficulty you forgot yourself. Just for an instant you touched reality, and from the contact a wave of creative force pulsed through you and left order and harmony where discord and disorder were before. So it has been always. When the monuments of the world were in building, when the Parthenon and the temples of Hellas were growing up in the heart of Greece, or being made in the mountain quarries, the workmen were shaping not mere temples and statues, but embodiments of the national ideal, the statutes of eternal beauty. It was the Greek spirit they presented. They were craftsmen with a living tradition. They were thronged thought-centers in the mind of Greece. Slaves they may have been technically, yet not more slaves than any one of us who is tied and bound by ineluctable obligations, without compensating freedom of expression. Moreover, in so far as they were slaves, the Attic workmen were free from care for the future, free to devote the whole power of their minds to their tasks"

INNOVATION IN ART

In the course of his recent lecture at the Royal Academy on "The Achievement of Greek Sculpture in its Relation to Modern Art," Sir Charles Waldstein said the reformers of the present day wished to widen the domain of art so as to comprise the whole of nature and of life. If the domain of artistic subject and treatment were fixed by convention, then the revolt was a sign of vitality; but if it merely meant opposition to what had been painfully evolved by the logical effort of previous ages, it meant retrogression from civilization to savagery. The history of Greek art was the history of a succession of such struggles, ending in the reinstatement of its essential spirit. The strife of the pres-

ent day was not exceptional, but marked the usual process of artistic development. In other fields of art the controversies connected with the names of Flaubert, Victor Hugo, Strauss, and Debussy marked similar stages of progress. Movements which were essentially negative were usually ephemeral. What he objected to in the work, and still more in the theories, of many present-day innovators was not their positive achievement but their opposition to what they called beauty. Their work became often a puerile or exaggerated protest against that which had hitherto been regarded as worthy of artistic effort. In painting a head they seemed to enjoin that the coarsest peasant face should be selected, and in representing a nude female figure to be called "Venus" it seemed to be the vogue to choose a model with the thinnest legs, the most exaggerated hips, and the most evident signs of want or excess. Such an artist might claim to have "followed nature," but he would be emphatically and absurdly wrong in attributing to nature his own vagaries.—*The Architectural Review* (London).

ARCHITECTURAL YEAR-BOOK OF TULANE UNIVERSITY

The Department of Architecture at Tulane University, New Orleans, La., has issued a Year-Book illustrating the work of their four-year courses in Architecture and Architectural Engineering. The curriculum and methods of instruction seem to be in accord with those of the best American schools.

BOOK NOTES

THE DUTCH COLONIAL HOUSE. Its origin, design, modern plan and construction. Illustrated with old examples of American adaptations of the style. By Aymar Embury, II. Full cloth, 108 pages, size 7 x 10 inches. Price \$2.00. New York: McBride, Nast & Co.

The author in his introduction states that "the true type of Dutch Colonial house passed out of existence one hundred years ago, and can never be revived. The modern houses which we denominate as 'Dutch' in style are in so many respects different from the New Jersey farmhouse that often it is more or less difficult to see the connection between them." He further states that the feature which particularly distinguishes them as descendants of Dutch architecture is their employment of the gambrel roof, but believes that it is not employed to-day in the true Dutch manner but rather following the practice common in New England. As a matter of fact, the tendency to designate any house with a gambrel roof as "Dutch Colonial"—a feature, by the way, that is said to have had its inception in France—has led to so many modifications of the

THE AMERICAN ARCHITECT

original Dutch type as found in New Jersey, as to lead to confusion in specifically placing this style.

Examples of extant houses that truthfully show the Dutch influence and that were erected either during or shortly after the Colonial period, and illustrated in this work, are very interesting records, and form the most attractive feature of this book.

The modern adaptation is also shown by many illustrations, which in most instances do not appear to have been entirely successful.

The intermingling of Georgian motives both inside and out of these newer houses has not served to preserve the purity of the type.

Mr. Embury has treated his subject with much frankness and shows little respect for the later imitators of the earlier house. He writes at some length on the genesis of the style and has made careful study of the material employed, and the treatment of the roof.

A chapter treating of details of hardware and other accessories is interesting.

The work has apparently been prepared with the special object of supplementing the limited architectural knowledge of the average client.

THE ART OF COLOUR DECORATION. By J. D. Crace, F.S.A., Hon. A.R.I.B.A. With facsimiles and colored drawings by the author, and other illustrations. Full cloth, 90 pages, size 9½ x 12. Imported by Charles Scribner's Sons, New York.

The object of this work, and it is a commendable one, is to explain how color affects architecture and to show quite apart from the question of color

harmony how all-important is the distribution of color values in assisting or marring architectural effects.

The author has divided his book into nine chapters, in which he treats of the distribution of values, the scheme of color, an explanation of surface and contour, with hints on modern work and practical application. An interesting chapter is one which describes the treatment of surfaces in color by the old masters. In all probability greater opportunities will be afforded in the early future to the architect in this country, for the introduction of color into the interior and exterior of buildings, as there seems to be a marked tendency in that direction. It is well, therefore, to be able to take up so complete a discussion of this important subject. We believe that the work will be found of value to men in practice.

THE "COUNTRY LIFE" BOOK OF COTTAGES (Costing from £150 to £600.) By Lawrence Weaver. Full cloth, 230 pages, size 5½ x 9. Imported by Charles Scribner's Sons, New York.

This book is mainly interesting as presenting in a single volume the more interesting types of low-cost English country houses that have found publication in the English Architectural press during the last year or two. Mr. Weaver, who has supplied the text, has written around the various illustrations much of interest concerning methods of practice in England, all of which will have suggestive value to the man who is making a study of the subject of designing and planning country houses in England.

INDUSTRIAL INFORMATION

***I**n this section will be found information concerning late catalogues issued by manufacturers of building materials, fixtures or equipment. Also under this head will be printed, from time to time, certain data relative to new devices or methods of construction considered to be of interest to architects. Architects are invited to make use of THE AMERICAN ARCHITECT'S Catalogue Files and Information Department whenever they can do so to advantage. Any assistance we can render or information we can furnish in this connection will be freely given.*

ARTIFICIAL LIGHT CONTROL

"Correct Practice in Control of Light" is the name of a booklet issued by the National X-Ray Reflector Company, 235 Jackson Boulevard, Chicago. In this system the source of light is contained within an opaque bowl at the bottom of which is a scientifically designed reflector of silver plated glass. This reflects the rays to the light colored ceiling, whence they are again reflected with considerable uniformity to all parts of the room.

It is claimed that this indirect method of lighting affords the maximum comfort for the eyes, since there is no glare and harsh, objectionable shadows are eliminated.

COMPOSITION FLOORS, WAINSCOTS, ETC.

The Idealite Company of South Bend, Ind., has recently issued an elaborate catalogue illustrating and describing their product, which they term, "The Modern Mosaic." "Idealite" is described as a combination of bonding material in conjunction with permanent colors and various sizes and kinds of aggregates which, when mixed, bring about a reaction and amalgamation of all the ingredients. The material is used in a plastic or semi-plastic state for application on wood, concrete, stone, brick or iron, for producing what is claimed to be an elastic, permanent, monolithic, fireproof, waterproof and jointless finished surface.

THE AMERICAN ARCHITECT

The degree to which the material meets the claims of the manufacturers is indicated by a number of testimonial letters from various users in Indiana, Ohio, Michigan, Kentucky and Illinois. The material is designed for use as a flooring, base, wainscot, stair treads and risers, and in a variety of other positions which will readily suggest themselves.

The catalogue referred to presents a number of designs in colors, contains a record of tests made on the material, and gives information as to the methods of preparation for Idealite work. It will be furnished to architects upon request.

REFRIGERATORS

The Monroe Refrigerator is thoroughly illustrated and described in Catalogue No. 22, recently issued by the Monroe Refrigerator Company, Lockland, Cincinnati, Ohio. In this work the various features of a refrigerator are taken up in detail and discussed, and the method of construction and design adopted for the "Monroe" justified.

Food compartments are of white porcelain; perfect dry air circulation is claimed and the necessity for dry air in the preservation of foods dwelt upon; the question of insulation and general construction are also discussed; interior fittings, such as shelves, trap, drainage, etc., are fully explained and a series of refrigerators of different dimensions and capacity illustrated.

This company, while carrying a large stock of standard sizes and types, also builds refrigerators to order for residences, apartment houses, clubs, hospitals, etc. In cases of special equipment, refrigerators can be constructed in sections and built in with other pantry fixtures.

RUSSWIN DOOR HARDWARE

The Russell & Erwin Division of the American Hardware Corp., of New Britain, Conn., have recently issued a set of monographs illustrating new designs in door hardware. The unique guest room door-knockers are of special interest.

Their booklet on Russwin Elevator Controllers for single and double doors, claims for them the advantages of quick closing, freedom from slamming and secure locking.

WESTERN FLOODS AND CONCRETE BRIDGES

The June Bulletin, issued by the Universal Portland Cement Co., with general offices at 72 W. Adams Street, Chicago, states that one thousand bridges are estimated to have been wrecked in Ohio alone by the March floods. It is further stated that the concrete bridge seems to be the only type which has come through the recent experiences with practically a clear record.

CREOSOTE COLOR CHART

Samuel Cabot, Incorporated, of Boston, with offices also in New York and Chicago, have issued a new color chart in pamphlet form for their Creosote stains. By manipulating the divided leaves, sixty-four different combinations of color can be made in such a way as to be very helpful in selecting a pleasing color scheme for a house of any style.

It is claimed that these stains are unsurpassed in durability and wood-preserving qualities, and that they reduce the inflammability of the wood to which they are applied, as they contain no kerosene, benzine or other petroleum distillate. Cabot's Creosote Shingle stains have been in use for more than thirty years and enjoy a popularity which it would seem could only be explained by acknowledging their exceptional merits. The color chart will be sent to architects on request.

TEMPERATURE CONTROL

"Automatic Temperature Control" is the title of Catalogue D, recently issued by the Standard Regulator Company, 90 West Street, New York City, makers of Victor regulators. "The Standard" system, operated by compressed air, is claimed to be applicable to every known artificial heating and ventilating apparatus. A thermostat is installed in each room or heating chamber in which temperature regulation is desired, operating the respective automatic valves or dampers attached to the heat sources.

This company has also devised regulators for the automatic control of pressure and humidity, which may be adapted for all purposes.

SHADES AND GLOBES

The Macbeth-Evans Glass Company, Pittsburgh, Pa., has issued a booklet of more than one hundred pages devoted to the subjects of shades and globes. Most of the shades illustrated are intended for residence lighting, but some of them, especially Alba, a name given to a particular product, are also appropriate for offices, stores, hotels, restaurants, public buildings and all places where efficient and yet agreeably softened light is desired.

The booklet discusses the various requirements of lighting, illumination versus decoration, decorative shades, assistance in good lighting and other topics of interest to those confronted with problems of interior illumination.

The widest range in form and materials is shown in this book, which has apparently been prepared with greatest care, so that it may be looked upon as both comprehensive and authoritative in its character.

A number of colored plates add to the attractiveness of the work and also to the accuracy of the pictorial presentation. It is sent on request.



Residence of Arthur Curtis James, Newport, R. I.
Howells & Stokes, Arch'ts, N. Y.
Deadened with Cabot's Quilt.

Cabot's "Quilt"

The Scientific Sound-deadener and Heat Insulator

Sound-proof Heat-proof Rot-proof
An efficient fire-retardant

Quilt has **every** quality that can be required for the best work—because it is **made** that way

SAMPLES AND CATALOG ON REQUEST

SAMUEL CABOT, INC., MFG. CHEMISTS, Boston, Mass.
1133 Broadway, NEW YORK 24 West Kinzie St., CHICAGO
Cabot's Creosote Shingle Stains, Waterproof Cement and Brick Stains, Conservo Wood Preservative, Dampproofing, Waterproofing. Agents all over the country.



Fireproof Library Interiors

are possible without sacrificing beauty of design or ornamental effect. The State Library at Hartford, Conn., is a splendid example. Critics pronounce it a distinct achievement. Book stacks, galleries, wainscoting and all interior trim is

Art Metal Steel and Bronze

Architects are invited to make use of our highly specialized experience and unequalled manufacturing facilities.

We operate the largest and best-equipped Metal Furniture plant in the world.

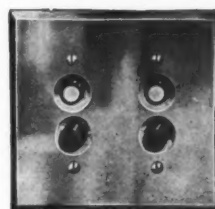
Art Metal Construction Company

Jamestown, N. Y.

BRANCHES: New York, Chicago, Philadelphia, Boston, Washington, Baltimore, St. Louis, Pittsburgh, Kansas City.

Our New Catalogs are just off the press. Handsomely illustrated. Four books: "Libraries," "Banks," "Public Buildings," "Commercial and Ins. Offices." Send for books wanted.

2 Story Stack State Library Hartford, Conn.



H & H Switches No Longer Cost More

By specializing upon the manufacture of just this one type of wiring device, and by building up a large volume of production, this Company has been able to reduce the price of H & H Switches until they no longer cost more than other switches.

Every Switch Tested

Every H & H Push Switch is tested for mechanical strength by being snapped about 500 times before being shipped, and we spare no expense in inspecting and gauging every part during all the processes of manufacture.

Even with a large volume of production, it is only by being content with a narrow margin of profit per switch that we are able to sell H & H Switches at the same price as other switches.

Ask any practising electrical engineer or contractor about the reputation of H & H Switches.

Listed in Sweet's Index.

The Hart & Hegeman Mfg. Co.
344 Capitol Ave., Hartford, Conn.



Trade Mark
Reg. U. S. Pat. Off.

For garages of stucco or concrete, as well as for stucco houses there is nothing that protects concrete from moisture and consequent hair cracking so well as

Bay State Brick and Cement Coating

"Lights like the sun"

A New England product that is used in the biggest textile mills, and on some of the finest residences not only in New England, but all over the country.

The material is a fire retarder and a great reflector of light. Ask your dealer for it. If he cannot supply you write us. Drop a postal for Booklet E, that tells you all about Bay State Brick and Cement Coating.

WADSWORTH, HOWLAND & CO., Inc.

Paint and Varnish Makers and Lead Corrodors

82-84 Washington St., Boston, Mass.

New York Office, 101 Park Avenue, 40th Street

It was used here:



Mr. E. K. Pritchett's Residence, Grand Rapids, Mich.
Wm. W. Clarke, Architect.

BUILDING NEWS

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

ALABAMA

DOTHAN.—Henderson & Adams and the Malone Furniture Company will rebuild on the site of their former quarters, recently destroyed by fire.

ARIZONA

BISBEE.—Peter Johnson will invest between \$15,000 and \$20,000 in building improvements. The larger part of the investment will be in a two-story hotel building, to be located immediately in the rear of the Fair store. Mr. Johnson also will erect two dwellings on vacant property adjoining the hotel.

PHOENIX.—J. W. Stone has purchased land on North Central Avenue which he intends to improve with a fine country residence.

The Trustees of Phoenix School District No. 1 invite bids until July 18, 1913, for the erection of a brick grade school building as per plans and specifications on file in the office of the Superintendent of Schools, Craig Building, corner of Central Avenue and Monroe Street, or at the office of Norman F. Marsh, architect, No. 212-214 Broadway, Central Building, Los Angeles, California.

ARKANSAS

TEXARKANA.—The matter of enlarging the present quarters of the Moose Lodge is being discussed by members of the organization. W. D. Felty is dictator of the local order.

CALIFORNIA

LOS ANGELES.—It is understood that Mr. and Mrs. Edward Doheny through a gift of a large sum of money have made possible the immediate plans for a magnificent new church building for St. Vincent's parish to be erected at the corner of West Adams and Gigueroa streets. The Very Rev. Dr. J. S. Glass, C. M., is pastor.

OAKLAND.—G. Albert Lansburgh of San Francisco has completed designs for the proposed synagogue for the First Hebrew Congregation. Cost \$100,000.

OAK PARK.—George Schelser has purchased property situated on Thirty-fifth St., near Cypress Ave., upon which he proposes to build a two-story structure to cost about \$8,000.

PASADENA.—James Culbertson has purchased for Mrs. Hicks land on Madeline drive adjoining the J. J. Blickhome. Mrs. Hicks will build a \$10,000 home upon the property.

Katherine M. Duncan has bought of Colonel G. G. Green the northwest corner of Maiden lane and Prospect. She will build a \$10,000 home upon the site.

PIEDMONT.—On land recently purchased, Mrs. Alexander Pantages will erect a handsome \$75,000 residence for her own occupancy.

SACRAMENTO.—The California Hotel property at Twelfth and I Streets has been purchased by Joseph Dettling. It is Mr. Dettling's intention to build an addition to the hotel in the near future.

Improvements to cost about \$15,000 will be made to the corner of Eighth and J. Streets on property belonging to the Guth estate and occupied by the Windsor Hotel.

SACRAMENTO.—T. B. Richards and I. Christie, associated with the Studebaker Company, are negotiating for a lease on the C. C. Cotter property, on the south side of L St., between Seventh and Eighth. They plan to cover the lot with a two-story building costing between \$10,000 and \$20,000.

SACRAMENTO.—Bishop W. H. Moreland is president of the newly created Trinity Cathedral Corporation that contemplates erection of a magnificent cathedral on land within the block bounded by M and N, Twenty-sixth and Twenty-seventh Streets.

SAN FRANCISCO.—The Carpenters' Hall Association has purchased a site for its new hall at the southwest corner of Valencia and McCoppin (formerly Hermann) streets and its directors are considering plans for a building of imposing appearance.

SAN FRANCISCO.—The board of library trustees has invited the following named architects to submit plans for the new library building, which is to be built in the civic center, at the corner of Larkin and McAllister Sts.: George W. Kelham, Albert Pissis, Willis Polk & Co., Reid Bros., Ward & Blohme, Edgar A. Mathews.

SAN FRANCISCO.—A new \$50,000 headquarters building for the Salvation Army of San Francisco will be the result of the bequest contained in the will of the late G. N. Thompson, of New York.

Commissioner Thomas Estie, of Chicago, now at the St. Francis Hotel, has charge of all the posts of the Salvation Army west of Chicago.

VENICE.—The Board of Education announces that a bond issue for a new high school building was carried at a recent election.

COLORADO

DENVER.—The Henrich Real Estate Company purchased property in East Denver, Ullmans & Lessing addition. It is the intention of the company to build about forty bungalows on the site costing approximately \$200,000.

CONNECTICUT

BRIDGEPORT.—It is reported that S. H. Wheeler will shortly erect a large office building at the corner of Congress and Main Streets.

The plant of the Belamore Armored Car & Equipment Company at the corner of Fairfield and Holland avenues has been purchased by the Blue Ribbon Auto & Garage Company. The new owners will build a large addition.

Preliminary plans for the new high school building have been accepted by the building committee and the architect, James Gamble Rogers, of New York, has been authorized to complete the working drawings.

HARTFORD.—At a recent meeting it was decided by the South School District to erect a \$60,000 school building on a site which now includes the Seymour, Day and Dodge properties.

DELAWARE

NEWARK.—Governor Miller, State Treasurer Hastings and Adjutant General Wickersham, members of the State Military Commission, have been appointed to secure a site for the proposed \$15,000 armory building to be erected for Company E.

WILMINGTON.—It is reported that the Nixon-Nirdlinger Prudential Company of Dover are contemplating the erection of a new theater on the site of the old Hilles Bldg. and the building at 904-6 Market St.

DISTRICT OF COLUMBIA

WASHINGTON.—It is proposed by the Virginia Highlands Country Club to build an attractive clubhouse on lots which have been donated by the Virginia Highlands Association.

Truxton Beale, former United States minister to Persia, announces that he will erect in Washington, near the building of the Pan-American Union, an elaborate building for

Fenestra
SOLID STEEL WINDOWS

Fenestra-lighted Beaver Power Building, Dayton, Ohio, which not only checked fire, but came through unscathed!



When Other Buildings Burn



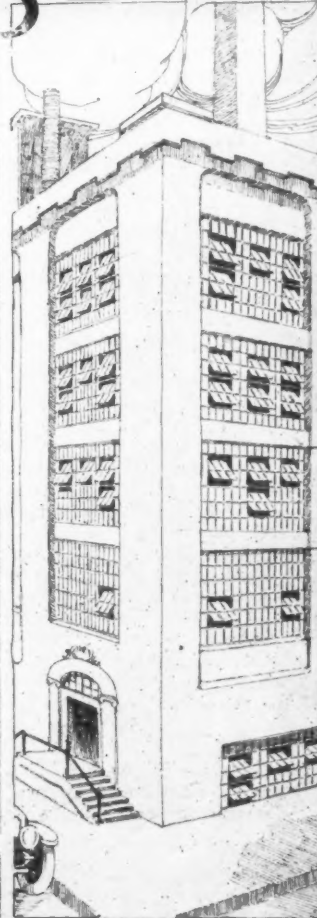
After Fire and Flood had

devastated down-town districts, and attacked the (Fenestra - lighted) Beaver Power Building, the architects, Messrs. Schenck & Williams, of Dayton, wrote us in part as follows:

"In no case has the sash shown any signs of distortion or weakness due to the severe exposure during the great conflagration. From statements made by persons who were in the building at the time of the fire and who stated that the heat was most intense, it is hard for us to understand why some damage was not done. We believe the results clearly show that your product is of a superior quality and one to be recommended for all classes of work in which this form of sash may be adopted."

On request, we will immediately mail you our new special circulars, and architects' complete letter covering this event. Also, if you have not a copy of our new eighty-page book, write us today for Catalog V describing this leader among steel windows.

***Do it now while you
are thinking about it.***



DETROIT STEEL PRODUCTS CO.
MANUFACTURERS - Dep't 79 DETROIT, MICH.

the housing of "a federation designed for the political education of college and university men."

FLORIDA

DAYTONA.—The City Hotel Company, a corporation of which H. Dohm is president, will erect a five-story brick hotel building on the present site of the City Hotel, at the corner of Orange and Palmetto avenues. Cost \$60,000.

PENSACOLA.—For the purpose of erecting an excelsior factory M. G. Hoffman, of Merrill, Ill., purchased land in the Maxen tract, on which he proposes to erect fireproof buildings and sheds. The site is on O St., between the Deep Water Route and the Pensacola, Mobile & New Orleans Road.

STARKE.—The Board of Freeholders will vote soon to determine the matter of the issuance of bonds for \$30,000 for a new school building.

TALLAHASSEE.—The State Railroad Commissioners have issued an order commanding the Jacksonville Terminal Company and all railroad lines entering Jacksonville to erect a new union station there on the site of the present one.

GEORGIA

ATLANTA.—John G. Burkhardt is contemplating the erection of a brick building at Peachtree and Roswell Roads.

IDAHO

WALLACE.—Citizens of Wallace will vote on the proposal of the local school board to issue \$55,000 in bonds for the purpose of erecting a new high school building and a school gymnasium.

ILLINOIS

EAST ST. LOUIS.—The plans of the Chicago & Alton, Clover Leaf System and the Chicago, Peoria & St. Louis railroads for improving freight handling facilities provide for construction of five new buildings at an expenditure of \$1,250,000. Mr. R. L. Dore is chief traffic official of the Clover Leaf System, and J. P. Ramsey is president of the Chicago, Peoria & St. Louis line.

LINCOLN.—\$10,000 will be spent in remodelling the Science Hall buildings at Blackburn College, of which Rev. William M. Hudson is president.

INDIANA

INDIANAPOLIS.—Trustees of Indiana university have authorized a bond issue of \$200,000 for the construction of the Robert W. Long hospital.

MARION.—A big addition to the plant of the Hoosier Stove Company at South Adams and 26th Sts. is soon to be built.

MUNCIE.—Bids will be received by C. E. Pittenger, trustee, at his office, No. 306 Vattel Block, Muncie, Ind., until 10 o'clock a. m., July 12, 1913, for the erection of a brick school building in Center Township, District No. 16, Delaware County, Muncie, Ind.

Also for the erection of an addition to the existing building in Center Township, District No. 15, Delaware County, Muncie, Ind.

NEW ALBANY.—A bill appropriating \$10,000 for extensions to the present post office building has passed the Legislature.

PORTLAND.—City School Board has decided upon extensive improvement to two buildings in order to equip the institutions properly for vocational training work. Bonds to the amount of \$15,000 will be issued to raise the necessary money.

IOWA

ALBIA.—The main building of the Albia Packing Company's plant being destroyed by fire, the officers of the company announce they will soon rebuild on the site.

CLINTON.—The sum of \$255,000 has been appropriated for the purpose of erecting new buildings for the Stout Institute. A new \$200,000 domestic science building will be one improvement. It is to be four stories high and will include a gymnasium and auditorium. A \$50,000 manual training and trade school building is another proposed improvement.

DES MOINES.—A new \$50,000 Masonic hall will be erected soon by the East Des Moines Masons on the site of their building at the southeast corner of East Sixth and Locust Sts.

DES MOINES.—A Greater Des Moines Methodist movement, involving the raising and expenditure of \$100,000 for four new churches, has been started. Tentative plans include a new church for Northwest Des Moines to cost about \$20,000; a church to accommodate the district between University avenue and Rock Island tracks, \$20,000; one to be built up by the Rock Island shops in East Des Moines and another in Southeast Des Moines for the City Mission works, in charge of Rev. Mr. Fagen, to cost \$25,000 to \$40,000. Rev. Edgar M. Evans, of Trinity Church, North Des Moines, is interested in the undertaking.

DES MOINES.—Contingent upon the raising of an equal amount by the Danish people, Mr. L. Larsen, of Racine, Wis., has donated the sum of \$15,000, to be used in the erection of a building for a national home for aged Danish people.

DUBUQUE.—The Dubuque Hotel Co. is the name of a new corporation organized for the purpose of building a new hotel at a cost of \$400,000 on the site of the Julien Hotel which was destroyed by fire recently. The directors of the corporation are: John T. Adams, W. E. Dennis, A. F. Heeb, C. H. Eighney, Geo. McLean, W. H. Day, Jr., and C. A. Voelker.

GRISWOLD.—Jack Lawson has purchased the old M. E. Church property which is being torn down, so that on the site a new church edifice to cost \$15,000, may be erected.

KANSAS

LEAVENWORTH.—C. W. Parker has purchased the residence at the intersection of Fourth and Pine Sts., which he will remodel at a cost of \$5,000.

SPEARVILLE.—Taxpayers of School District No. 4 have decided to erect a school building in the near future.

KENTUCKY

BLACKKEY.—The Women's Christian Temperance Union will start at once the erection of a college building to cost about \$10,000.

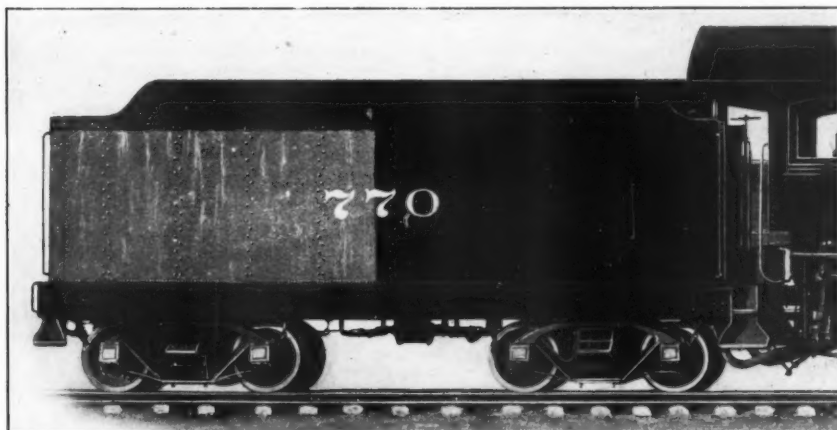
CAMPTON.—Citizens have subscribed \$10,000 for the purpose of rebuilding the courthouse, which was recently destroyed by fire. It is expected to raise enough by private subscription to build a \$20,000 structure.

JACKSON.—A bill has been passed by Congress authorizing the expenditure of \$20,000 for a Federal building at Jackson. The site proposed adjoins the Thompson Hotel on Broadway.

LEXINGTON.—The City Board of Education at a meeting passed a resolution requesting the Board of City Commissioners to call an election to vote on a proposed bond issue of \$100,000 for school improvement purposes, including the erection and equipment of three new school buildings.

WHITESBURY.—The School Board has under consideration new school buildings at Middle Colly, Lester, Line Fork, Upper Rockhouse and Lower Rockhouse.

LOUISVILLE.—At the annual meeting of the Young Men's Hebrew Association authority was granted the board of directors to proceed with plans for building improvements. The directors named are: Ben S. Washer, M. W. Ades, Lee S. Bernheim, Dr. Frank Fleischaker, Dr. S. C. Frankel, Charles Goldsmith, Louis Grossman, Louis Isaacs, J. B.



A Varnish Test

This locomotive was used for a test of the durability of varnishes. The undercoats were the same over the entire tank. The front end was given two coats of Valspar. The rear end was given two coats of one of the best known makes of clear locomotive finishing varnish.



When the car came out of the shop it was a brilliant black from one end to the other. The cold water in the tank caused it to sweat continuously. The Valspar, being absolutely waterproof, was unharmed and remained perfectly transparent and brilliant. The other varnish turned white rapidly. It took only a month of hot weather to get the above result.

This "locomotive test" tells a story of great practical interest to architects. It demonstrates the fact that Valspar is absolutely

waterproof. It is the only varnish in the world that water won't turn white.

Unlike all other long-oil varnishes, Valspar dries quickly—sets dustproof in 2 hours, and ready for wear in 24 hours.

For floors, woodwork and furniture, no other varnish will prove as dependable and lasting as Valspar.

Free two-ounce sample, booklet and copy of varnish specifications mailed upon request.

**VALENTINE'S
VARNISHES**
TRADE MARK

Valentine & Company

455 Fourth Ave., New York

Established 1832

CHICAGO BOSTON TORONTO PARIS AMSTERDAM

Judah, Henry Klauber, Charles New, Ben H. Saches, Stanley E. Sloss, A. B. Weber and Louis Cohen.

The new subdivision owned by the Frank Fehr estate overlooking Cherokee Park has been purchased by Mrs. M. E. A. Dudley, who will build a new residence in Bracview.

The Louisville Gas and Electric Co. will erect a new concrete garage at the northwest corner of Seventh St. and Ormsby Ave.

LOUISIANA

ALEXANDRIA.—Rapides Camp No. 17, Woodmen of the World, bought a lot at the corner of Jackson and Sixth Sts., on which it expects to build a modern lodge hall.

NEW ORLEANS.—Citizens have asked the Jefferson Parish School Board to take action in reference to building a modern school to replace the one destroyed by fire a short time ago.

NEW ORLEANS.—J. D. Atkinson will erect a magnificent residence on Short street, between Belfast and Fontainebleau Drive.

NEW ORLEANS.—The Napoleon Avenue Presbyterians recently paid \$20,000 for a site on St. Charles Ave., and will build thereon a \$100,000 edifice.

MAINE

GARDINER.—A joint committee has been appointed to procure preliminary plans for the proposed new high school building.

PORTLAND.—Mayor Oakley C. Curtis is taking steps toward the erection of a new high school building. Site has not yet been selected.

MASSACHUSETTS

EAST LYNN.—Herbert J. Petrie, of 69 Pearl street, is to erect a three-story structure on the premises now occupied in part by a two and one-half-story dwelling house at 53 Essex street, corner of Eastern avenue.

MICHIGAN

BAY CITY.—A project which contemplates the construction of a new six-story bank building to be located at Center and Washington Streets is being discussed by directors of the First National Bank.

GRAND RAPIDS.—Charles R. Sligh and others contemplate erection of a \$150,000 theatre on the site of the old courthouse at Lyon St. and Bond Ave.

The Baxter St. Christian School Association is planning to build a \$16,000 addition to its present structure.

A project to put up a six-story building to be used by the C. O. S. and allied organizations is being seriously considered by Orin Stair, who owns property at the rear of the Majestic Theater.

KALAMAZOO.—The Grand Trunk Railroad Co., (Mr. A. B. Atwater, assistant to the president) has purchased the Hanselman property on East Main St. It is the intention of the company to improve with a freight and passenger terminal to cost over \$100,000.

MINNESOTA

DULUTH.—Plans for the construction of two clubhouses, one to be located in the bayou at Sixty-first Ave. West, and the other on the Wisconsin shore near the mouth of the Red River, were features of the meeting of the Western Boat Club.

EVELETH.—A new manual training school building is under consideration by the board of education. The site in view for the building is the vacant ground between Jones and Jackson Sts. just east of the high school building, on ground now used for athletics.

MISSISSIPPI

LAUREL.—The Young Men's Christian Association is making plans for the erection of a new \$50,000 home.

NEW HAMPSHIRE

MANCHESTER.—Victor Charas of Clarksburg, W. Va., has leased the property known as the Wells lot on Hanover Street. He states that it is his intention to erect a three-story brick building on the site.

It is stated that at a special meeting of the sub-committee of the board of trustees of the Elliot hospital, a proposition of lease of the hospital property at the northwest corner of Hanover and Chestnut Streets from Joseph R. Laflamme was accepted. It is understood that Mr. Laflamme is to erect a brick building on the property.

NEW JERSEY

ARLINGTON.—Mrs. H. B. Ritner has purchased from the estate of H. G. Eilshemius the southeast corner of Grand and Laurel Aves., on the Eilshemius tract. A house will be erected for the owner's occupancy.

ATLANTIC CITY.—Lots have been purchased by Rev. Robert Morris Rabb, adjacent to The Vermont House on Vermont Ave. for the erection of a beautiful house of worship.

Definite plans for the future extensions of the Orange Memorial Hospital are under consideration by the Board of Governors.

PATERSON.—An apartment house will be constructed at Sixteenth Ave. and Summer St. by Samuel Frankel. The building will be of brick and will cost about \$18,000.

NEW YORK

BINGHAMTON.—Howard W. Brown has purchased the vacant lot located at 118-120 Chenango street and expects to erect thereon a four-story brick apartment house.

BROOKLYN.—The Congregational Home for the Aged in Brooklyn has purchased a large plot in the Flatbush section for the erection of a new home. The property has a frontage on the north side of Linden avenue, between Bedford and Rogers avenues. The new building will cost over \$200,000. Plans are being prepared by the architects, Walter E. & W. A. Parfitt.

BROOKLYN.—The Peerless Towel Supply Company, now occupying property to be taken for the site of the new Manhattan courthouse, has purchased three old frame dwellings in Gold St., along the Flatbush Ave. extension, which will be demolished to make room for a building to be used as a distributing plant for the concern.

A vacant plot at the Bush Terminal on the northwest corner of Second Ave. and 65th St., has been sold by Howard C. Pyle & Co., for A. S. Ryken to a client, who it is reported will improve the land with a factory building.

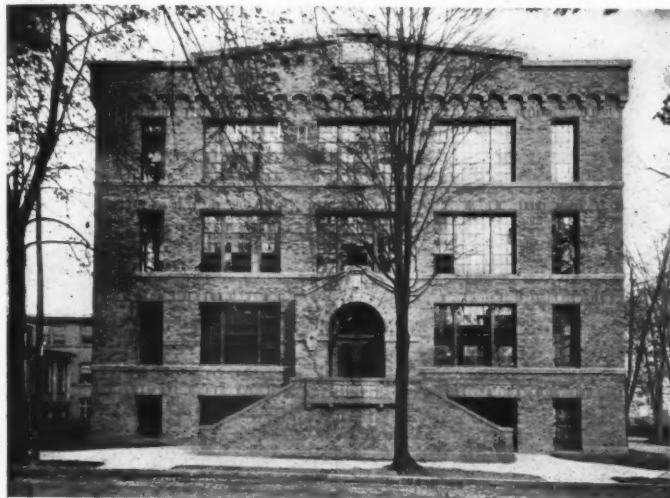
Congregation Tetach Tickvact, of which William B. Roth is president, filed plans for a synagogue to be built at the northwest corner of Rochester Ave. and Lincoln Pl. The congregation now meets at 1515 Lincoln Pl. The structure will cost about \$30,000.

Plans were filed for three large apartment buildings to be erected at Hewes St. and Lee Ave., to cost \$200,000. They are to be built by Isaac Holt of 86 W. 119th St., Manhattan.

The Marcellus Mansion at 151 Joralemon St. has been purchased by the Allied Realty Interest, who plan to demolish it and on the site erect a five-story apartment house to cost about \$50,000.

DUNKIRK.—Announcement is made by David S. Wright, a stockholder of the Lake Shore Seed Company, whose plant was recently destroyed by fire that the company will rebuild in the near future.

LARCHMONT MANOR.—Whitney Lyon has bought from the Louis V. Sone estate property known as the Point



BEVIER MEMORIAL, MECHANIC'S INSTITUTE, ROCHESTER, N. Y.

CLAUDE BRAGDON, ARCHITECT.

Foundation waterproofed with Hydrex Waterproof Felt
cemented together with (hot) Hydrex Compound.

ard high-grade felt for waterproofing foundations, tunnels, reservoirs, swimming pools, etc.
Two or more layers are used cemented together with (hot) HYDREX Compound—"The
Membrane Method" of waterproofing.

Have you a waterproofing problem? Write us, and we will be pleased to give you the
benefit of our extensive experience in this line.

THE HYDREX FELT & ENGINEERING CO.

Manufacturers of Waterproofing Felts, Building Papers, Deadening Felt, Roofings, etc.
Specialists in Structural Waterproofing, Thermal Insulation and Soundproofing.

Chicago

Washington

121 Liberty Street, New York

Factories: Rahway, N. J.

Foundation Waterproofing

is an important feature in building construction, especially where there is waterpressure to resist. To use for such work a "cheap," ineffective waterproofing is false economy, because waterproofing once applied, especially below grade, cannot again be reached and must endure for the life of the structure.

HYDREX Waterproofing Felt

is not like the ordinary waterproofing felts. It is a tough, elastic, saturated and coated felt especially made for underground waterproofing conditions. It is the acknowledged stand-

HYDREX Preservative PAINT

Unexcelled for coating
and damp-proofing interior
surface of brick
walls above grade
also hollow tile
walls.



PYROFUSE Type "F"

Pyrofuse

Garbage Destroyers

GAS versus COAL

Did you ever stop to think how many modern improvements are the direct result of the use of gas as a fuel?

In burning garbage, for instance, a heat of 2000° is secured in the Pyrofuse machine and in addition this hot Bunsen flame attacks the wet garbage direct because of the careful construction of this machine.

J. B. Prescott & Son, Mfrs.

Factory and Main Office
Webster, Mass.

New York Office
38 W. 32nd St.

Branches in all large cities

House. It is planned to erect a \$1,000,000 hotel on the site.

LONG ISLAND CITY.—The Renault Freres Company have bought a plot at Jackson, Third and Beebe Avenues, on which it will erect a two-story service building.

LONG ISLAND CITY.—The Renault Freres Company selling branch, 719 Fifth avenue, Manhattan, has acquired a plot at Jackson, Third and Beebe avenues, on which it will erect a two-story service building.

NEW YORK CITY.—Roy Barnett has purchased from Margaret J. Decker a vacant plot on the southwest corner of Charlotte St. and Crotona Park East. The buyer will improve the site with an apartment house.

NEW YORK CITY.—A seven-story home for nurses is to be erected by the Women's Hospital adjoining the latter building on the south side of 110th St., between Amsterdam and Columbus Aves. Allen & Collens, of Boston, Mass., architects. The cost is estimated at \$125,000.

Schwartz & Gross, 347 Fifth Ave., have filed plans for a twelve-story tenement on Lexington Ave., southeast corner of 72nd St., for E. A. L. Z. Realty Co., 505 Fifth Ave. Cost, \$250,000.

J. D. Rockefeller, Jr., 10 W. Fifty-fourth Street, will erect a ten-story store and loft building on Fifth Avenue, south of Fifty-fourth Street at a cost of \$200,000. W. W. Bosworth, 527 Fifth Avenue has been employed as architect.

On Southern Boulevard, north of 176th Street, the P. J. Dwyer Building Company, 176th Street and Trafalgar Place, will put up a five-story brick tenement costing \$45,000, according to plans filed by the Kreymborg Architectural Company, 183d Street and Southern Boulevard.

Edward J. Byrne, 3029 Third Avenue, has filed plans for erection of two five-story brick tenements on 168th Street, south of Forest Avenue, for the Moorhead Realty and Construction Company. Cost \$70,000.

NEW YORK CITY.—Plans were filed for the construction of a one-story theatre for W. Vincent Astor on the southwest corner of Broadway and Ninety-fifth street. Charles A. Platt is the architect, and has placed the cost at \$150,000.

NEW YORK CITY.—The five houses on the southeast corner of West End Avenue and Seventy-eighth Street have been sold to George Backer and Arnstein & Levy, who propose to raze the structures and on the site erect a twelve-story apartment house.

Plans have been filed for the construction of a five-story private dwelling for M. Orme Wilson, Jr., on the north side of Sixty-fourth Street, east of Fifth Avenue. Trowbridge & Livingston are the architects. The cost has been placed at \$75,000.

A \$45,000 six-story tenement building will be erected on Bank Stret, east of Fourth Street, for the Martha Building Corporation, 960 Prospect Avenue, according to plans filed by C. B. Meyers, 1 Union Square.

NEW YORK CITY.—Wallis & Goodwillie, 346 Fourth Ave., have filed plans for construction of a twelve-story loft building on Thirty-third St., east of Madison Ave., for the East Thirty-third Street Realty Co., to cost \$400,000.

At 124 and 126 West Fifty-fifth St., the George Barker Construction Co., 33 West Forty-second St., will erect an eight-story apartment house to cost \$140,000, from plans prepared by Wallis & Goodwillie, 346 Fourth Ave.

Alterations will be made to a three-story stable and dwelling at 137 East Sixty-ninth St. for A. C. James, 99 John St., according to plans filed by Barney & Colt and P. A. Andrews, 40 West Thirty-eighth St. Cost, \$20,000.

NORTH TONAWANDA.—L. S. Degraff, representing business men of the Tonawandas, has offered to build a \$40,000 hospital in Christiana St., providing the city maintains the institution. The Common Council has accepted the offer.

ROCHESTER.—The wholesale grocery house of George C. Buell & Company, No. 25 Water Street, destroyed by fire

will be rebuilt soon. John H. Childs is local manager of the plant.

SARANAC LAKE.—Walter Sagendorf is considering the erection of a building on his property on Broadway just between the Berkeley Hotel and the F. W. Loomis store.

SCHENECTADY.—Bids will be received by the Board of Contract and Supply of the City of Schenectady, N. Y., at their office in the City Hall Annex, until 2.30 p. m., Wednesday, July 23, 1913, for the proposed three new schools for the Second, Ninth and Tenth Wards, Schenectady, N. Y. Plans may be seen and specifications and bidding blanks procured at the office of the City Engineer and Architect, Mr. W. Thomas Wooley, No. 447 Franklin St., Schenectady, N. Y.

Estimates will be received by the Board of Contract and Supply of the City of Schenectady, at their office in the City Hall Annex, until 2.30 p. m., Wednesday, July 16, 1913, for the construction of Public Market Buildings on Market Square, at the corner of Center and Hamilton Sts., Schenectady, N. Y. Plans and specifications may be obtained from the office of the City Engineer and Architect, Mr. W. Thomas Wooley, No. 447 Franklin St., Schenectady, N. Y.

NORTH CAROLINA

KINSTON.—The College of the Free Will Baptists in North Carolina, now located at Ayden, contemplates removal to Kinston, where it is intended to replace the frame structure of the college with brick administration, auditorium and dormitory buildings.

RALEIGH.—The Raleigh Real Estate and Trust Company has purchased property on Martin St. as a site for the proposed new city market to cost \$100,000.

NORTH DAKOTA

MADDOCK.—A county training school is to be built according to plans drawn by W. J. Edwards, of Grand Forks, at a cost of \$35,000.

WILLISTON.—The First Congregational Church has decided to build a new church to cost \$35,000 and bids for the erection of it are being advertised for.

OHIO

CLEVELAND.—A plot of land on Euclid Ave. has been purchased for the F. B. Stearns Company, which proposes to erect an extension to its present plant on the site.

CLEVELAND.—The Rauch & Lang Carriage Co. will erect soon a four-story building at West Twenty-sixth St. and Chatham Ave., Cleveland.

DAYTON.—At the annual meeting of the joint board of commissioners of Montgomery and Preble Counties and the Board of Trustees of the District Tuberculosis Hospital, a resolution was passed directing the trustees to prepare plans for erection of a new hospital on a site off the Eaton Pike, five miles west of Dayton.

DAYTON.—The old smokestack of the former Kratochwill Milling Company is being razed, preparatory to the erection on the site of a new plant for the Excelsior Laundry Company, to cost \$35,000.

PIQUA.—The congregation of St. Paul's Evangelical church has voted to build a new parsonage to be erected on the site of the present parsonage. The following building committee will be in charge: John Schimmell, George Heidle, Miss Callie Scheter, Mrs. Carl Loeffler and the Rev. Paul J. Gehm.

TOLEDO.—Plans are being prepared for the complete remodeling of the three-story brick building on Superior St., formerly occupied by the News-Bee. The building is owned by the Superior Realty Co.

WASHINGTON.—Notice is given that bids will be received up till 12 o'clock noon July 19, 1913, by the Board of Education at the office of the clerk of said board, for the construction of a two-room brick school on the premises recently purchased of J. E. Albring in Subdistrict No. 1



SENECA BUILDING, BUFFALO, NEW YORK
McKenzie, Voorhees & Gmelin, Architects
I. S. & G. C. Rossell, Contractor

A Little More Evidence

There are three things that make a building architecturally correct,—the architecture, the construction and the materials employed.

Atlas-White is a Portland Cement, it is white and *non-staining*. That is why it was used in this building for setting all the terra cotta and enamel brick.

Atlas-White Non-Staining Portland Cement absolutely justifies its name and its reputation.



"The standard by which all other makes are measured"

THE ATLAS PORTLAND CEMENT CO.

30 BROAD ST., NEW YORK

Corn Exchange Bank Bldg. Chicago, Ill.

Marine Bldg. Philadelphia, Pa. Plymouth Bldg. Minneapolis, Minn.

Productive capacity over
50,000 barrels per day

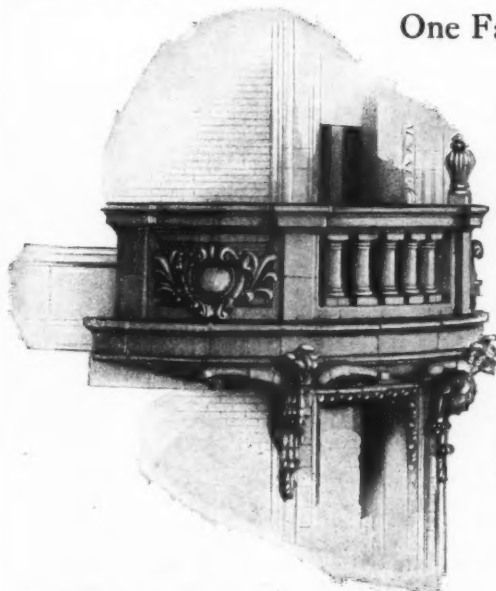


Largest in the
"World"



New York Architectural Terra-Cotta Company

One Factory—One Management—For 27 Years



The experience of twenty-seven years' practical work has developed for us experts upon every point in Terra Cotta Construction

These men are always at the service of Architects for consultation



TWO enormous new kilns, just completed, enable us to materially extend our output—quality to be of the uniformly high grade which has always distinguished the NEW YORK COMPANY'S TERRA COTTA.

New York Architectural Terra-Cotta Company

401 Vernon Avenue

Borough of Queens

New York City

in accordance with the plans and specifications on file at the office of said clerk and of Louis G. Welker, Architect, 950 Spitzer Bldg., Toledo, Ohio.

YOUNGSTOWN.—The Youngstown Sheet and Tube Co. is preparing plans for a large three-story brick and concrete office building for the accommodation of officials and the large clerical force employed at the works of the company in East Youngstown. The building will be located on the south side of the river.

ZANESVILLE.—The Wheeling & Lake Erie has asked council to vacate Lasalle Street so that the company can build depots and other buildings to replace those lost in the recent flood. The company has plans for a \$15,000 passenger station, a \$10,000 freight depot, a \$30,000 roundhouse, and a \$10,000 roundhouse for a branch road on the opposite side of the river.

PENNSYLVANIA

HARRISBURG.—The members of the Lutheran Church contemplate erection of a new church edifice on a plot of ground which they own, to take the place of their building which was recently destroyed by fire.

An appropriation of \$350,000 was authorized by the legislature for establishing an Industrial Home for Women.

JOHNSTOWN.—The Blairsville Presbytery of the Presbyterian Church has decided to authorize the erection of an edifice at Jerome, Somerset County.

LEBANON.—At a recent meeting of the stockholders of the Lebanon Creamery Company it was voted to erect a new sanitary milk, ice cream and condensed milk factory and ice plant.

PEDRICKTOWN.—Citizens of Oldmans Township have voted to erect a \$20,000 schoolhouse.

PHILADELPHIA.—E. F. Durang is preparing plans for an addition to the parochial school of St. Leo's Catholic Church, Tacony.

Carl P. Berger is designing a two-story dye-house, and a power-house for the Hellwig Silk Dyeing Company, at Milnor Street and the Delaware River.

David Cram will build 24 two-story dwellings, Nos. 5710 to 5732 and Nos. 5711 to 5733 Broomall avenue, to cost \$52,800.

PITTSBURGH.—A new hotel to cost about \$2,000,000 will be erected soon at Sixth avenue and Smithfield street by the William Penn Hotel Company. Charles A. Blanchard is a member of the firm.

The German Evangelical Protestant Church, of which Rev. Carl A. Voss is pastor, contemplates erection of a new church edifice immediately adjacent to the proposed William Penn Hotel.

PHILADELPHIA.—The J. T. Jackson Company has sold to William P. Muench the residence on the west side of York road north of Lakeside Avenue and adjoining the Methodist Church. The residence will be demolished and on the site will be erected four houses.

PHILADELPHIA.—Plans are being made to rebuild at once the hosiery factory of Sylvester Clouse & Son, at Parkerford, which was recently burned.

RHODE ISLAND

PROVIDENCE.—The commission appointed by the General Assembly of the State of Rhode Island, to erect an armory for the mounted commands, R. I. N. G., invites proposals for the building to be erected on the easterly side of North Main St., between Stenton Ave. and Armory St., in the city of Providence, R. I.

Plans and specifications may be obtained from Messrs. Wm. R. Walker & Son, architects, 17 Custom House St., Providence, R. I., or John J. Richards, secretary of the commission, at Room 517, Industrial Trust Building, Providence, not later than 12 o'clock noon, of Monday, July 21, 1913, or by the commission, at Room 212, State House,

Providence, R. I., at 1 o'clock p. m., sharp, of the above date.

The request of the local school board for an appropriation to erect new buildings in the Darlington, Fairlawn, South Woodlawn and Baldwin St. school districts, and an addition to the high school, is being considered by the Common Council.

The Common Council passed the resolution recommended by the city property committee for the purchase of a plot of land bounded by Courtland, Carpenter, Pierce and Marshall Sts. as the location for a grammar school to supersede the present Bridgeham school.

SOUTH DAKOTA

COLOMBE.—Steps are being taken by the School Board for erection of a new school building.

SIoux FALLS.—The large residence which will be erected on the site of the east grounds of All Saints School for the home of the Rt. Rev. George Biller, Bishop of South Dakota, in the Episcopal Church, will cost \$18,000.

TENNESSEE

CLEVELAND.—The congregation of the Inman Street Baptist church has settled definitely on a site for their new \$25,000 church which will be started at once.

MEMPHIS.—Movement for a \$1,000,000 federal building at Memphis will be launched in a few days. It has received the indorsement of Congressman K. D. McKellar, who may introduce a bill authorizing the construction of the building at the next session of Congress.

NASHVILLE.—A lot at the corner of Grand Ave. and Rokeby Pl. has been purchased as the site for a new and modern building for the Wallace University school, of which Prof. C. B. Wallace is principal.

TEXAS

BROWNWOOD.—Armour & Co. have closed a deal whereby they purchase a site on the Santa Fe tracks for the erection of a modern cold storage plant.

CLEBURNE.—The Southwestern Telegraph & Telephone Company has purchased a corner lot, fronting on North Anglin street, and will construct a new building on it to cost \$21,000.

FORT WORTH.—A \$75,000 building will be erected by the newly organized Auditorium Company to be located at Fifth and Throckmorton streets. B. J. Tillar is a director of the organization.

SAN ANTONIO.—The construction of a tall building by the Steves Brothers is a contemplated improvement on St. Mary's street.

SULPHUR SPRINGS.—Nelta and Richland school districts have voted bonds for the erection of school buildings.

TEMPLE.—The voters of Willow Grove school district of Bell County have voted bonds in the sum of \$8,000 for a modern brick or concrete school building.

TEMPLE.—The congregation of the First Christian Church at Rogers, twelve miles south of Temple, will erect a new brick church building at a cost of \$15,000.

VIRGINIA

BRISTOL.—A new high school building is soon to be erected at a cost of \$50,000. F. B. Fitzpatrick is superintendent of schools.

WISCONSIN

KAUKAUNA.—Members of the Trinity Lutheran Church are taking steps to erect a new \$20,000 church. The old one will be torn down and the new one built in its place.

RACINE.—A modern apartment building is to be erected on the lake front at the corner of Fifteenth and Main streets at a cost of \$60,000. The building will be put up for the Wolff Realty Company.

Alphabetical List of Advertisers

Ads. marked E. O. W. appear every other week.
Ads. marked O. A. M. appear once a month.

- A**
Abt, Hugo C. E. 18
Adams, James. 18
American Luxfer Prism Co. 2
American Machine Co. (e.o.w.) 20
American Mason Safety Tread Co. 20
American Radiator Co. (e.o.w.) 20
American Sheet & Tin Plate Co. 28
American Steel & Wire Co. 25
Art Metal Construction Co. 7
Artesian Well & Supply Co. 7
Atlantic Terra Cotta Co. 15
Atlas Portland Cement Co. (e.o.w.) 15
Automatic Refrigerating Co. 38
- B**
Barrett Mfg. Co. 19
Bayley & Sons. 21
Berger Mfg. Co. 21
Best Bros. Keene's Cement Co. (e.o.w.) 21
Bird, F. W., & Son (o.a.m.) 27
Boyle, John, & Co., Inc. 27
Bradford Pressed Brick Co. 27
Byers, A. M., Co. 27
- C**
Cabot, Samuel, Inc. 7
Cahill Iron Works. 24
Campbell, Walter M. 18
Carey, Philip Co. 42
Carpenter, Geo. B., & Co. (e.o.w.) 23
Carter White Lead Co. 23
Chelsea Elevator Co. (e.o.w.) 23
Church, C. F., Mfg. Co. (e.o.w.) 26
Clow, James B., & Sons (e.o.w.) 26
Colonial Fireplace Co. (e.o.w.) 24
Concealed Transom Lift Co. 24
Condron Co. 51
Corbin, P. & F. (e.o.w.) 51
Corrugated Bar Co. (e.o.w.) 22
Cudell, F. E. (e.o.w.) 22
Cutler Mail Chute Co. 20
- D**
Darby, Edw., & Sons Co., Inc. (e.o.w.) 22
Decorators' Supply Co. (e.o.w.) 22
Detroit Show Case Co. (o.a.m.) 9
Detroit Steel Products Co. 9
Dexter Bros. 21
Diamond Door Hanger Co. 19
Dixon Crucible Co., Jos. 19
Drake, Frederick J., & Co. 19
Drouvé, G., Co. 19
Dunning, W. D. 19
- E**
Elevator Supply and Repair Co. 56
Emery, Wm. S. 19
Estey Organ Co. 19
Eureka Fire Hose Co. (e.o.w.) 31
- F**
Fay & Bowen Co. 18
Facile Window Co., The, Inc. 18
Falkenhaimer, E. 18
Federal Terra Cotta Co. (o.a.m.) 20
Fiske & Co. 21
French & Co., Samuel H. 21
- G**
General Electric Co. (e.o.w.) 21
General Fireproofing Co. (e.o.w.) 41
Gillespie & Son, Chas. H. (e.o.w.) 29
Gillis & Geoghegan. 29
Gillden Varnish Co. 23
Globe Ventilator Co. 23
Goodyear Tire & Rubber Co. 23
Gorham Co. (o.a.m.) 20
Granger Co., A. D. 20
Great Western Pottery Co. 20
Gurney Heater Mfg. Co. 19
- H**
Hardtmuth, L. & C. (o.a.m.) 20
Harrisburg Star Boiler Co. 20
Hart & Hegeman Mfg. Co., The. 7
Hartmann-Sanders Co. 7
Heinicke, H. R., Inc. (e.o.w.) 20
Hess Warming & Ventilating Co. (e.o.w.) 20
Higgins & Co., Chas. M. (e.o.w.) 20
Honeywell Heating & Specialty Co. 56
Hunt, Robert W., & Co. 56
Hydraulic-Press Brick Co. 47
Hydrex Felt & Engineering Co. (e.o.w.) 13
- I**
Imperial Brass Mfg. Co. 19
Industrial Engineering Co. 20
International Window Mfg. Co. 19
- J**
Jackson, Wm. H., Co. 20
Jacobson & Co. (o.a.m.) 20
Jefferson Glass Co. 56
Jenkins Bros. 56
John-Manville Co., H. W. 29-31-33
Johnston Paint Co., R. F. (e.o.w.) 29
- K**
Kahn System of Reinforced Concrete. 52-53-54
Kawneer Mfg. Co. 19
Keasbey & Mattison Co. 23
Keller Mfg. Co. 23
Kelly, Thos., & Bros. (e.o.w.) 22
Kennedy, David, Inc. (e.o.w.) 55
Kewanee Boiler Co. 55
- L**
Lee Marble Works (o.a.m.) 50
Loomis-Manning Filter Co. 20
Lowe Bros. Co. (o.a.m.) 20
Lufkin Rule Co. 20
Lupton's, David, Sons Co. 34
- M**
McCray Refrigerator Co. 30
Master Builders Co. 39
Merchant & Evans Co. (o.a.m.) 30
Milland Terra Cotta Co. 56
Moss Photo Engraving Co. 23
Mueller, H., Mfg. Co. (e.o.w.) 28
Mullins Co., The W. H. 32
Murphy Varnish Co. 32
- N**
National Fire Proofing Co. 20
National Lead Co. 45
National Metal Molding Co. (o.a.m.) 49
National Tube Co. 49
National X-Ray Reflector Co. 27
Never-Split Seat Co. 27
New York Architectural Terra-Cotta Co. 15
New York Belting & Packing Co. (e.o.w.) 17
New York Blower Co., The (e.o.w.) 17
Northern Hemlock & Hardwood Mfg. Assn. 22
Northrop, Coburn & Dodge Co. 22
Northwestern Terra Cotta Co. 22
- O**
Okonite Co. (e.o.w.) 19
Otis Elevator Co. (e.o.w.) 37
- P**
Pass & Seymour, Inc. 19
Pierce, Butler & Pierce Mfg. Co. (e.o.w.) 25
Pomeroy, S. H. Co., Inc. 24
Potsdam Red Sandstone Co. 24
Pratt & Lambert. 20
Prescott, J. B., & Son. 13
Pressed Metal Radiator Co. 26
Pullman Automatic Ventilator Co. 21
- R**
Raymond Concrete Pile Co. 35
Richards-Wilcox Mfg. Co. (e.o.w.) 33
Royal Ventilator Co. 36
Russell & Erwin Mfg. Co. 36
Ruud Mfg. Co. 36
- S**
Safety Insulated Wire & Cable Co. 19
Samson Cordage Works. 56
Sargent & Company (e.o.w.) 43
Schreiber & Sons Co., The L. 19
Sharp, W. M. Co., The. 21
Silver Lake Co. (e.o.w.) 21
Simons Heating & Specialty Co. 19
Smith, H. B., Co. (o.a.m.) 18
Society of Beaux-Arts Architects. 18
Sprague, Douglas, and Associate. 18
Sprague Electric Works. 19
Standard Regulator Co. 19
Standard Varnish Works. 19
Stanley & Patterson. 24
Stanley Works, The (e.o.w.) 24
Sturtevant Co., B. F. 18
Syracuse University. 18
- T**
Thompson, Lewis & Co., Inc. 40
Thorp Fire Proof Door Co. 40
Tiffany Studios. 32
Trenton Pottery Co. 32
Trussed Concrete Steel Co. 52-53-54
Turner Construction Co. 54
- U**
U. S. Gypsum Co. 19
U. S. Mineral Wool Co. 19
U. S. Radiator Corporation. 19
Universal Safety Tread Co. 18
University of Michigan. 18
- V**
Vaile & Young. 20
Valentine & Co. 11
- W**
Wadsworth, Howland & Co., Inc. (o.a.m.) 7
Washington University. 18
Weisz, G. A. 18
Western Electric Co. (e.o.w.) 18
White Fireproof Construction Co. 21
Winkle Terra Cotta Co. (o.a.m.) 21
Wolff, L., Mfg. Co. 46
Woodbury Granite Co. 48
Wright, Frank Lloyd. 48
- Y**
Yellow Pine Mfrs. Ass'n (e.o.w.) 44

The Hygienic Floor for the Kitchen and Bath



Kitchen—Horton Residence, Middletown, N. Y.

Absolute cleanliness and freedom from germs are assured by installing floors of

INTERLOCKING RUBBER TILING

Noiseless, non-slippery, waterproof, fire-resisting and sanitary. CHEAPEST IN THE LONG RUN, for it is so durable as to last indefinitely.

The Best Floor for

Banks
Office Buildings
Churches
Hotels and Restaurants
Theatres
Hospitals
Libraries
R. R. Terminals
Clubs
Residences
Government and Municipal Buildings



Architects and owners are invited to write for Catalogue "D," samples and color suggestions.

New York Belting & Packing Co.

Original Manufacturers

91-93 Chambers Street, New York City

Philadelphia Pittsburg Chicago
Boston St. Louis San Francisco

Washington University ST. LOUIS, MISSOURI SCHOOL OF ARCHITECTURE

Four-year course in Architecture with degree of B.S. Two-year course in Design with certificate. Course in Architectural Engineering. Special students received. A Postgraduate course in Design, leading to the degree of M.S., has recently been established. All work in Design is in charge of Professor CHARLES ABELLA, of the Ecole des Beaux-Arts. For further information address JOHN BEVERLEY ROBINSON, Professor of Architecture.

COLLEGE OF FINE ARTS SYRACUSE UNIVERSITY Department of Architecture

Four-year course in Architecture leading to the degree of B.A. Special two-year course for students who have had two or more years of office experience. For bulletin and information, address Registrar, Syracuse University, Syracuse, N. Y.

TO ARCHITECTS

Competition Designs and Perspectives in Water Colors, Sepia or Ink. Assistance on Preliminary Sketches by mail or at Architects' Offices by Arrangement. Address James Adams, Oak Cottage, Arlington, N. J.

A Free Course in Architectural Design

conducted by

The Society of Beaux Arts Architects

Seventeenth Season—Aug. to July, inclusive

The course is open to draughtsmen and students of architectural schools in any city of the United States or Canada, modeled on the principles of instruction at the Ecole des Beaux-Arts in Paris. It consists of thirty-five (35) competitions divided into two classes supplemented by prize competitions, to enter any of which an annual Registration Fee of \$2.00 is required. Address applications for circulars of information and calendars for season 1912-13 to:

William Emerson, Chairman,
Committee on Education,
281 Fifth Avenue, New York City.

WHALL—STAINED GLASS WORK

By C. W. Whall. A text-book for students and workers in glass. 5 x 7½. Boards. 381 pages, 70 illustrations, 16 plates.....\$1.50
Book Department, THE AMERICAN ARCHITECT, 50 Union Sq., New York

Hugo Abt, C. E.

Reinforced Concrete and Steel Designs

222 Wisconsin St., CHICAGO, ILL.

Rendering of Perspectives in any Medium

Drawing of Perspectives

G. A. Weisz, 15 East 40th St., N. Y.

Telephone Murray Hill 3659

University of Michigan

DEPARTMENT OF ARCHITECTURE

Four-year courses in Architecture and Architectural Engineering. Two-year course for special students. For information, address Department of Architecture, University of Michigan, Ann Arbor, Michigan.

Draughtsmen's Blouses

(FRENCH SMOCKS)

\$1.50 Sent prepaid on receipt of \$1.50
State Height and Weight

E. Falkenhainer, 25 W. 42d St., New York

Perspectives Rendered

In Pen and Ink and Water Color

WALTER M. CAMPBELL
8 Beacon Street, BOSTON, MASS.

RATES for Classified Advertising

Positions Wanted, 50 cents for 50 words or less; Help Wanted, Special Notices, Competitions, Proposals, Etc., 20 cents a line, minimum four lines. Copy received until 12 m. Monday. Remittance should accompany copy.

POSITIONS WANTED

GRADUATE CIVIL ENGINEER, thoroughly proficient in structural design and building construction, heating and ventilation, working drawings, specifications, estimates and contracts, good executive, desires a working interest with architectural firm, or general contractor, having sufficient business to warrant the employment of an all-around, high-grade man. Address 40C, care The American Architect. (1940 & tf)

SUBURBAN ARCHITECT, seven years' own practice, New York City, and five as draughtsman, proficient office man or superintendent, inside or out. Design, building construction, hollow tile, fireproofing, specifications, etc. Competent to prepare complete plans and working drawings from sketches. Salary moderate if assured merit and devotion to work are recognized and rewarded. Address S. W. L. Chatham, N. J., P. O. Box 10, Lock Box 10. (1957-58)

A YOUNG ARCHITECT of good address desires to become associated with reliable architectural firm in the East in the capacity of Southern representative. Can produce business for firm specializing on office buildings and hotels of \$100,000 and over. Six years' own practice in large Southern city. Salary \$2,000 year; references. Address 57E, care The American Architect. (1957-58)

ARCHITECTURAL DRAUGHTSMAN, 10 years' experience public, office and bank buildings, apartment houses and residences, wishes immediate engagement; good city references. Capable of handling all sketches, working drawings, details, specifications and superintendence. Address 57F, care The American Architect. (1957-58)

SUPERINTENDENT OF CONSTRUCTION, thoroughly competent and practical, desires position; location immaterial. Am 36 years of age and have 17 years' experience with architects and builders; at present employed as architect's superintendent. Address 58B, care The American Architect. (1958-59-60)

MAN OF EXPERIENCE with leading New York architects, practical draughting, specifications, superintendence and general office management, wishes position, salary or profit-sharing basis. References. Address 58A, care The American Architect. (1958-59)

DRAUGHTSMAN, JUNIOR, first-class, 2, broad experience, quick and very practical; architectural student; will work free in high grade architect's office, for only a little help from employer in suggestions and architectural advice. Address 58D, care The American Architect.

SITUATION WANTED by architectural draughtsman, 21 years old, 4½ years' experience. Plans, elevations, details, perspectives, competitions, etc. Best work and references. Address 58C, care The American Architect. (1958)

HELP WANTED

ARCHITECTURAL and Ornamental Iron Draughtsmen needed constantly; salaries \$18 to \$35 per week. The Engineering Agency, Inc., Monadnock Block, Chicago.

A LARGE New York concern manufacturing a high-class artistic branch of architectural work requires the services of a first-class man, fully competent at designing, detail and rendering. Give particulars as to training, salary and references. Address 57B, care The American Architect. (1957-58-59-60)

SPECIAL NOTICE

FOR SALE—One-half interest in old-established architectural business in a thriving Eastern city—to a young, active and well-trained man—the best of reasons for selling and the closest scrutiny invited. For particulars address 56C, care The American Architect. (1957-58-59)

PROPOSALS

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 18, 1913. Sealed Proposals will be received at this office until 3 o'clock p. m. on the 11th day of July, 1913, and then opened, for an electric dumbwaiter in the south wing of the United States Marine Hospital (reconstruction), New York, N. Y. (Stapleton, S. I.), in accordance with the specification, copies of which may be obtained at this office at the discretion of the Supervising Architect.

O. WENDEROTH, Supervising Architect. (1957-58)

NOTICE TO BUILDING CONTRACTORS

Sealed Proposals will be received by the Board of Contract and Supply, of the City of Schenectady, New York, at their office in the City Hall Annex until 2.30 p. m. Wednesday, July 23, 1913, for the general construction, plumbing and gas fitting, heating and ventilating and electrical work for the proposed three new schools for the Second, Ninth and Tenth Wards, Schenectady, N. Y. Plans may be seen and specifications and bidding blanks procured at the office of the City Engineer and Architect, Mr. W. Thomas Woo'ey, No. 447 Franklin St., Schenectady, N. Y. Blue print plans, to a limited number, may be procured by any person so desiring, by depositing with the said engineer and architect the sum of \$25.00.

BOARD OF CONTRACT & SUPPLY.
Fred E. Johnson, Secretary. (1957-58)

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 20, 1913. Sealed Proposals will be received in this office until 3 o'clock p. m. on the 31st day of July, 1913, and then opened, for the mechanical equipment (except lighting fixtures, elevator and lift) of the United States post office, Bangor, Me., in accordance with drawings and specification, copies of which may be obtained at the office of the superintendent of construction, Bangor, Me., or at this office, at the discretion of the Supervising Architect.

O. WENDEROTH, Supervising Architect. (1957-58)

THE L. SCHREIBER & SONS CO.

STRUCTURAL STEEL CINCINNATI ORNAMENTAL IRON

BRANCH OFFICES NEW YORK • CHICAGO • PITTSBURG • ATLANTA • NEW ORLEANS • SAN FRANCISCO • RICHMOND

EMERY SELF RAISING SEAT

Is the only absolutely sanitary closet seat. Positive acting, automatic spring hinges, guaranteed for five years, take the place of balls and weights, permitting close roughing.
Important—the EMERY seat can be furnished by any specialty or supply house as a part of any combination in their catalog, or direct from me.
Write for sample. Further information or demonstration at your convenience.

WILLIAM S. EMERY, Telephone: 76 Cliff St., New York



YOU cannot insure structural steel and iron against corrosion and decay but you can specify DIXON'S SILICA-GRAPHITE PAINT—it's the same thing. Booklet No. 14-B.

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

This is the age of making one thing better than anyone else

The SIMONDS VACUUM VALVE

has Superior Qualities that are Distinct Advantages over other kinds. Investigate.

THE SIMONDS HEATING AND SPECIALTY CO., Grand Rapids, Michigan

Mineral Wool

FIRE, SOUND and VERMIN PROOF INSULATOR
SAMPLES AND CIRCULARS FREE.

U. S. MINERAL WOOL CO., 140 Cedar St. NEW YORK

It Will Pay You to Investigate the

INGHAM SHOWER MIXER

Maximum Comfort, Safety and Economy. Write for free illustrated descriptive booklet "A Good Mixer."

IMPERIAL BRASS MANUFACTURING COMPANY
Dept. 174, 1222 W. Harrison Street, Chicago

FARADAY ENCLOSED - TYPE

Naturally the contractor will furnish a less satisfactory bell, unless you specify as above.

FARADAY ENCLOSED-TYPE BELLS NEVER FAIL!

Manufactured solely by
STANLEY & PATTERSON, New York, U.S.A.

The GEORGE PIVOT WINDOW

contains all the advantages of a regular double hung window and a pivotal sash, with a hitherto unavailable construction that is simple, safe, practical, inexpensive and absolutely reliable under all conditions.

Send for booklet of detailed description and sketches

Manufactured by the

INTERNATIONAL WINDOW MFG. COMPANY
2007-2009 W. Allegheny Avenue PHILADELPHIA, U. S. A.

KAWNEER Booklet No. 3 shows by full size details and photographs, various bars, sash and mouldings, together with a plain description of each

Send for the booklet and learn about KAWNEER registered ventilation and drainage — it has revolutionized Store Fronts.

KAWNEER MANUFACTURING CO
Factory and General Offices: NILES, MICH. Branches in all principal cities.

"The Barrett Specification."

For laying durable and economical roofs of Coal Tar Pitch, Tarred Felt and Slag or Gravel. Every architect needs it in his files. Free on request.

BARRETT MANUFACTURING COMPANY
New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Pittsburg, Cincinnati, Kansas City, Minneapolis, Seattle, Corey, Ala.

Shurlok

The socket that locks

PASS & SEYMOUR, Inc., Solvay, New York

GURNEY HEATERS

FOR STEAM AND HOT WATER GIVE COMPLETE SATISFACTION

GURNEY HEATER MFG. COMPANY
N.Y. BRANCH: 18 EAST 42ND ST. NEW YORK
BOSTON, MASS. HOME OFFICE: 188-200 FRANKLIN ST. BOSTON



SAFETY INSULATED WIRE & CABLE CO.

114 LIBERTY ST., NEW YORK

CHICAGO BOSTON
SAN FRANCISCO

OKONITE INSULATED ELECTRIC LIGHT WIRES

Are pronounced by leading Architects to be SAFE, DURABLE and EASILY ADJUSTED for the inside wiring of PUBLIC and PRIVATE BUILDINGS.

Sole Manufacturers THE OKONITE CO., 253 Broadway, New York

CENTRAL ELECTRIC CO., Chicago, Ill., General Western Agents
Novelty Electric Co., Phila., Pa. F. D. Lawrence Electric Co., Cincinnati, O.



TRADE MARK
REG. U. S. PATENT OFFICE.
Pettingell-Andrews Co., Boston, Mass.

**A Name
and a
Guarantee** ***LUFKIN*** **Measuring
Tapes
and Rules**

THE LUFKIN RULE CO. **Saginaw, Mich.**
No. 106 LAFAYETTE STREET, NEW YORK

MASON SAFETY TREADS
For Stairs, Wood, Iron, Marble or Cement New or Old
"Stanwood" Treads and Steps
HUNDREDS OF THOUSANDS IN USE
American Mason Safety Tread Co., Boston

National Fire Proofing Company

**Manufacturers of TERRA COTTA HOLLOW TILE
Contractors for FIREPROOF CONSTRUCTION**

Main Office: PITTSBURGH, PA., Fulton Building

Chicago, Commercial National Bank Bldg.	New York, Flatiron Bldg
Cincinnati, Union Trust Bldg.	Philadelphia, Land Title Bldg.
Canton, City National Bank Bldg.	Boston, John Hancock Bldg.
Detroit, Penobscot Bldg.	Washington, Colorado Bldg.
Syracuse, University Block	Baltimore, 15 East Fayette Street
Minneapolis, Lumber Exchange	Columbus, West Broad Street
Los Angeles, Central Bldg.	Chicago, Chamber of Commerce Bldg.

26 Factories in the United States



VAILE & YOUNG'S
Patent Metallic Skylights
Without Putty
 Construction adapted to all forms and styles of Skylights.
 Thousands of feet in use have proved its superiority. Particularly adapted for Depots, Mills, Factories, etc., where large and continuous lights are required. Send for Illustrated Catalogue.
214 N. Calvert St., Baltimore, Md.

CUTLER MAIL CHUTES
"The Cheapest Modern Improvement."
CUTLER MAIL CHUTE CO.
 ROCHESTER, N. Y.
PATENTED

"61" FLOOR VARNISH

PRATT & LAMBERT VARNISHES

Established 63 Years

Authorized Distributors
New York, Chicago, Cincinnati
Philadelphia, St. Louis, St. Paul
San Francisco, Seattle, Portland, Tacoma
Boston, New Orleans, Houston, Dallas
San Antonio, Austin, Fort Worth, El Paso
Phoenix, Salt Lake City, Denver, Kansas City
Omaha, Lincoln, Minneapolis, St. Cloud
Fargo, Bismarck, Grand Forks, Fargo
Sioux Falls, Rapid City, Pierre, Spearhead
Butte, Helena, Missoula, Great Falls
Bozeman, Billings, Casper, Cheyenne
Laramie, Sheridan, Torrington, Gillette
Rock Springs, Jackson, Pocatello, Idaho Falls
Twin Falls, Coeur d'Alene, Lewiston, Kelso
Poncha, Buhl, Minot, Grand Forks, Fargo
Duluth, Superior, Sault Ste. Marie, Iron Range
Marquette, Ishpeming, Escanaba, Ontonagon
Mackinac Island, Mackinaw, Alpena, Cheboygan
Charlevoix, Emmet, Benzie, Leelanau, Grand Haven
Muskegon, Grand Rapids, Holland, Spring Lake
Zeeland, Holland, Spring Lake, Zeeland, Holland
Spring Lake, Zeeland, Holland, Spring Lake, Zeeland

INDUSTRIAL ENGINEERING CO.
Engineers and Contractors
Reinforced Concrete and General Building Construction
HUDSON TERMINAL BUILDING
30 CHURCH ST (Telephone, 7815 Cortlandt) **NEW YORK**
Branch Offices: 100 State St., Albany, N. Y. Grant Bldg., Atlanta, Ga.

WHENEVER you are confronted by the problem of limited space for boiler room the HARRISBURG STAR BOILER will meet your requirements because it gives you the most power in the smallest space. Built to carry any steam pressure. Extremely low water line. *Shall we send you a catalogue?*

HARRISBURG STAR BOILER COMPANY
2 East 23rd Street New York City

Integro
EXPULSO DEVORO
Ejecto **WAVELINE**
 The Great Western Pottery Co., Tiffin, O. Kokomo, Ind.

LOOMIS FILTERS
Improved System Established 1880 Simple and Effective
LOOMIS-MANNING DISTRIBUTING FILTER CO.
Main Office:
328 Land Title Building, Broad and Chestnut Streets, Philadelphia
Boston Buffalo New York Baltimore Washington Chicago

Federal Terra Cotta Company

Trinity Building
111 Broadway, New York

Factory
Woodbridge, N. J.

Manufacturers of a Superior Grade of

**Architectural
Terra Cotta**

in all standard and polychrome colors, semi-glaze, matt glaze and full glaze finish.



HIGGINS'

DRAWING INKS
ETERNAL WRITING INK
ENGROSSING INK
TAURINE MUCILAGE
PHOTO-MOUNTER PASTE
DRAWING-BOARD PASTE
LIQUID PASTE
OFFICE PASTE
VEGETABLE GLUE, Etc.

ARE THE FINEST AND BEST
GOODS OF THEIR KIND

Emancipate yourself from the use of corrosive and ill-smelling inks and adhesives and adopt the **Higgins Inks and Adhesives**. They will be a revelation to you, they are so sweet, clean and well put up, and, withal, so efficient. They are specially adapted for use in Architects' and Engineers' Offices, as well as for general home and office use.

AT DEALERS GENERALLY

Chas. M. Higgins & Co., Manufacturers
Branches: Chicago, London 271 Ninth St., BROOKLYN, N. Y.

AMERICAN
ELEVATORS
— NOT IN THE TRUST —

AMERICAN
MACHINE
COMPANY
LOUISVILLE, KY.

Stained with Dexter Stains
O. J. Gette, Architect, New York.



When planning Summer homes, figure on using
Dexter Stains
BROTHERS ENGLISH SHINGLE

Preserve and beautify
Special preservative oils protect from the elements and prevent dry and wet rot, yet bring out all the beauty of the texture and grain of the wood. Best English ground pigments used—colors cannot fade. Better than paint, cost less than half.

Recommended and specified by leading architects. Let us send you miniature shingles and Booklet A.

DEXTER BROTHERS CO., 120 BROAD ST., BOSTON
Branch Office: 1133 Broadway, New York

Also makers of DEXTROLITE, the only WHITE ENAMEL which does NOT TURN YELLOW

AGENTS: H. M. Hooker Co., Chicago; Asam Bros. Inc., 917 Arch St., Philadelphia; F. H. McDonald, Grand Rapids; F. T. Crowe & Co., Seattle, Tacoma, Spokane, Wash., and Portland, Ore.; R. McC. Bullington & Co., Richmond; A. R. Hale, 818 Henson Bldg., New Orleans; Hoffschlaeger Co., Honolulu; and DEALERS.



SPECIFY
Silver Lake A
Sash Cord

and insist upon having it put in



Our name is stamped on every foot

WRITE FOR OUR 20 YEAR GUARANTEE

The Standard

Established 1869

BERGER'S *Metal Lumber*



The logical material to take the place of wood joists.
Replaces wood stick for stick.

Write for Catalog.

The Berger Mfg. Co. CANTON, O.

For the best service address nearest branch.

New York Philadelphia Minneapolis
Boston St. Louis San Francisco

Also manufacturers of Prong Lock Studs and Furring, Rib-Truss, Ferro-Lithic and Multiplex Reinforcing Plates, Metal Ceilings, Expanded Metal Lath, Sidewalk Forms, Raydiant Sidewalk Lights, etc.



We Want Every Architect

to have our table of Cowl capacities. It will help in specifying the size and number of roof Ventilators required to properly ventilate a building.

It is yours for the asking.

Pullman Automatic Ventilator Mfg. Co., York, Pa.

FRENCH'S
"Quality First"
PEERLESS MORTAR COLORS
BRIGHTEST—STRONGEST—UNFADING

The original and standard colors for coloring Interior and Exterior Mortars. Peerless Mortar Colors are ground in pulp form and can be worked into the mortar in much less time than dry colors.

Write for color card and prices.

Manufactured only by

SAMUEL H. FRENCH & CO.

Established 1844

PHILADELPHIA, PA.

The Winkle Terra Cotta Company

MANUFACTURERS OF

**ARCHITECTURAL
TERRA COTTA**

In All Colors

Office: Rooms 502 and 503, Century Building
ST. LOUIS, MO.

Works: Cheltenham, St. Louis

Corr-Construction

produces greater ultimate crushing strength through the use of the two-way system—compressing concrete, at right angles.

Corr-Tile is the design for **fireproof** office buildings, hotels, apartment houses, etc. *Economy* in headroom is obtained by this method as it allows a thinner floor by several inches.

Corrugated Bar Co., 402 Mutual Life Bldg., Buffalo, N. Y.

"22 years without a failure"

New York Boston Chicago St. Louis

Specifications and methods shown in Sweet's Index, 1913, pages 270-281



It Is Worth While for Architects to Know

that we have the largest and best equipped plant in the world for the manufacture of **Plastic Ornaments** and **Decorative Work** of all kinds in **Plastic Materials**.

We are constantly engaged in executing the designs of architects throughout the country in ornamental plaster, composition and cement work for theatres, hotels and other public buildings, and dwelling houses. We have the experience and the "know how" as well as the facilities.

THE DECORATORS' SUPPLY CO.

Archer Avenue and Leo Street

CHICAGO

FOR ARCHITECTURAL TERRA • COTTA



TRADE MARK ASSURES
A MATERIAL OF QUALITY & DISTINCTION
• PROMPT DELIVERY •

MAIN OFFICE AND FACTORY
2525 CLYBOURN AVE
CHICAGO ILL.

The Kelly Octopus Water Closet System

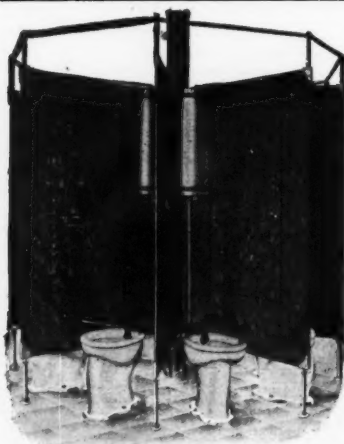
Patented Oct. 20, 1908; Dec. 1, 1908; Sept. 7, 1909.

The complete fixture as shown, occupies a space equal to a circle 7 ft. 6 in. in diameter. Set in the center of a room, this gives all the wall space for wash basins, urinals, sinks, etc.

Perfect ventilation; no trap venting needed.

THOS. KELLY & BROS.

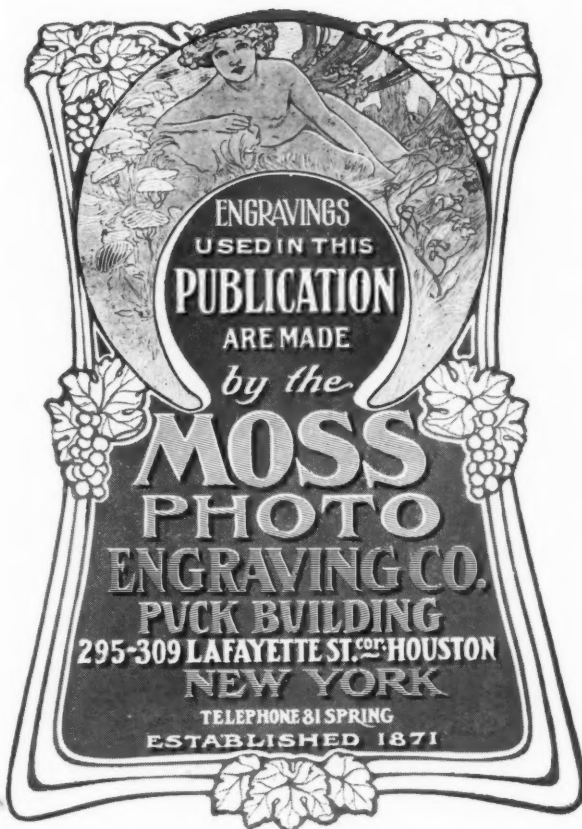
Congress St. and 46th Ave., Chicago



Octopus Water Supply Connections
complete water supply.

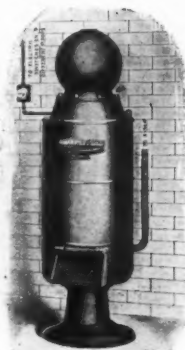


Kelly Octopus Closet Fitting, comprising all
plumbing below floor.



ENGRAVINGS
USED IN THIS
PUBLICATION
ARE MADE
by the
MOSS
PHOTO
ENGRAVING CO.
PUCK BUILDING
295-309 LAFAYETTE ST. COR. HOUSTON
NEW YORK
TELEPHONE 81 SPRING
ESTABLISHED 1871

Santo Duplex Vacuum Cleaner



Simplicity of construction insures easy operation and makes this machine practically fool-proof by thoughtless or careless servants.

40,000 "Santos" in use. Booklet gives details.

Keller Mfg Co
2048 Allegheny Avenue
Philadelphia

The "Globe"



A Ventilator that Ventilates

any sort of building from a barn to the largest and finest office building, church or theatre.

Its popularity is due to its effectiveness, simplicity and storm proof qualities.

Strongly constructed, it can be depended upon to give efficient service so long as the building shall endure.

We shall be glad to furnish model or catalogue.

The Globe Ventilator Co.
TROY, N. Y.



The White White Lead

THE PAINT BEAUTIFUL

Paint is important because it should convey the impression of superiority of the material which it covers. Beautiful paint is visible evidence of invisible excellence.

Carter White Lead makes the most beautiful paint and has unsurpassed preservative properties. The best buildings in thousands of cities and towns are standing evidence of Carter superiority. Carter is invariably accepted for government work.

The architect who specifies **Carter** is assured of paint that is as good as his design.

CARTER WHITE LEAD CO.

CHICAGO, ILL.

Factories: Chicago—Omaha

TWO "Southern Beauties"



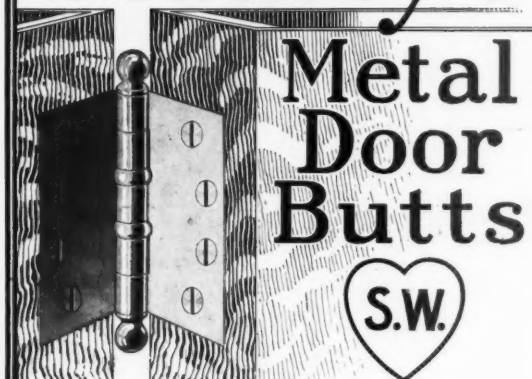
TRADE MARK.

And one is worthy of the other. "Southern Beauty" Enameled Ware is good enough for any one, North, East or West. It is pure white, durable and absolutely guaranteed.

The Cahill Iron Works, Chattanooga, Tenn.

New York Office and Display Rooms, 1161 Broadway, Thos. H. Hutchinson, Manager. Philadelphia Office, 5604 N. 4th St., Russell D. Knight, Sales Agent. Portland Office and Warehouse, 550 Sherlock Bldg., H. A. Heppner & Co., Sales Agents. San Francisco Office and Display Rooms, 1749 Sacramento St., C. H. Stanyan, Sales Agent. Havana, Cuba, Office, San Ignacio No. 50, Cagigas & Quesada, Sales Agents.

Stanley's



Holes accurately drilled to Template to insure perfect fit.

Made with Non-Rising Pins and equipped with Ball Bearings.

Write for full information regarding styles, sizes, finishes, etc.

"DEPARTMENT 2A"

THE STANLEY WORKS, New Britain, Conn.

The Highest Type of Fireproof Construction

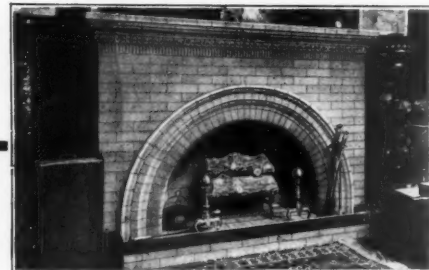
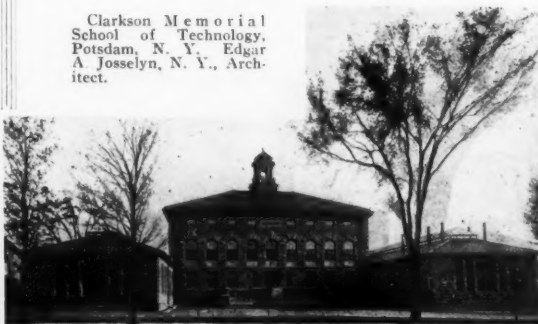
is unsafe if the stone shell of the building be susceptible to heat.

POTSDAM RED SANDSTONE is impervious to a white heat, steam, extremes of heat and cold and LIVES INDEFINITELY.

Technical report of convincing tests for fire resistance, crush, tensile strength and impenetrability, sent on request.

The Potsdam Red Sandstone Co., Potsdam, N.Y.

Clarkson Memorial
School of Technology,
Potsdam, N. Y., Edgar
A. Josselyn, N. Y., Arch-
itect.



You Can't Lay the Brick

But you *can* be sure of correct construction where most fireplaces go wrong, by specifying the

COLONIAL HEAD, THROAT AND DAMPER

The Colonial Head fits into the throat of the fireplace in such a manner as to make faulty work at that point impossible. Its construction provides for expansion and contraction, thus eliminating any danger of breaking or bulging of the fireplace face. It is adjustable to weather conditions by an outside key and all working parts may be removed for cleaning or replacement at any time.

Colonial Heads make perfect fireplaces.

Send for our full catalog of fireplace designs and see descriptive drawings in "Sweet's" and "A. B. C."

THE COLONIAL FIREPLACE CO.
4628 West 12th St., Chicago



Pierce Spence Water Boiler
fitted with new triangular bar
grate and base.

BEFORE you suggest
any heating boiler to a
customer, remember this:
the difference in cost between a

Pierce SPENCE Water Boiler

and a less efficient boiler is not enough
to pay for the difference in coal bills,
repair bills and comfort. And the slight
trouble it may require to convince the
customer of this is neither as great as
the trouble of tinkering up an unsatis-
factory heating system, nor as important
as the customer's good will.

If you don't know all
about the Pierce-Spence
and the new triangular bar
grate, be sure to write us
for information

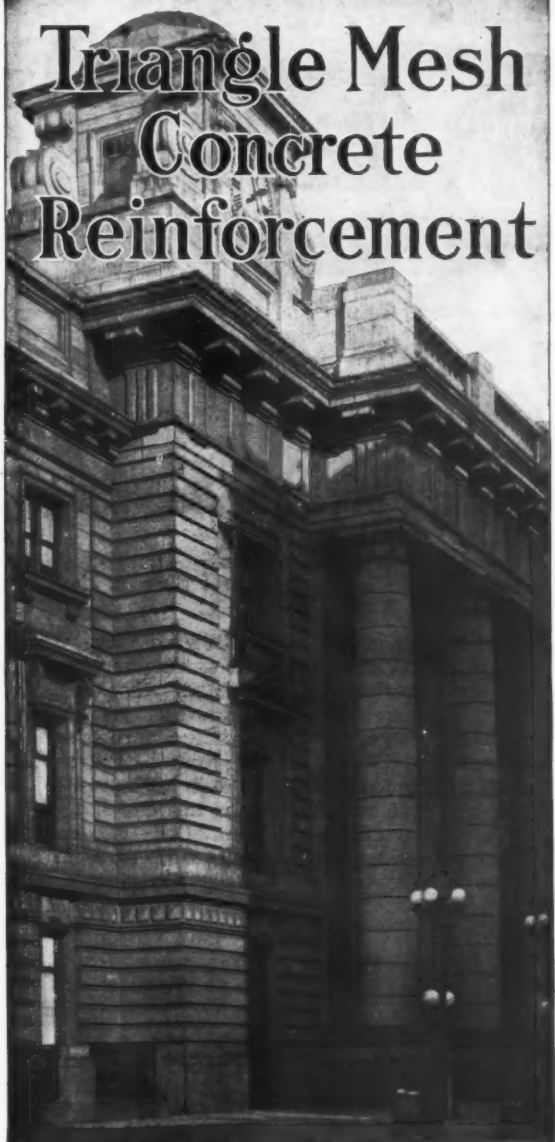


Pierce Mark

Pierce, Butler & Pierce Mfg. Co.
Syracuse, N. Y.

American Steel & Wire Company

Triangle Mesh Concrete Reinforcement



Frost & Granger, Architects

New Chicago & Northwestern Depot, Chicago

THREE hundred and twenty thousand
square feet of Triangle Mesh Concrete
Reinforcement used. Triangle Mesh
Concrete Reinforcement is made from Cold
Drawn Steel Wire. Tensile strength 85,000
pounds per square inch. Furnished in rolls
of 150, 200 and 300 feet long.

We are prepared to furnish this wire in all sizes and con-
ductors, both solid and flexible, from warehouses conveni-
ently located for quick delivery to all parts of the country.

Chicago New York Cleveland
Pittsburgh Worcester Denver

Export Representative: U. S. Steel Products Co., New York. Pacific
Coast Representative: U. S. Steel Products Co., San Francisco,
Los Angeles, Portland, Seattle.



Send For This Booklet

Every architect should become thoroughly informed about Kinnear Improved Pressed Metal Radiators.

This booklet is sort of a "bird's eye view" of Pressed Metal Radiators. It treats briefly of their construction, history, small size, light weight, sanitary features, durability, ease of regulation, large air spaces between sections, uniform heat distribution and general efficiency, and of Suspended Radiation. It is not meant to be a technical treatise on the subject, but is rather an introduction to reports of tests and other matter of a more professional nature which we are compiling and will make public later.

Kinnear Improved Pressed Metal Radiators

are being specified by many of the best architects in the United States and Canada. Among other things this booklet gives a list of a few of the well-known buildings equipped with them. Because of their light weight they are the only radiators that easily can be put "on the wall—off the floor—out of the way." In other words, with Pressed Metal Radiators, SUSPENDED RADIATION with its greater cleanliness is made possible at no additional cost.

Pressed Metal Radiators pay for themselves.

A letter or postal brings you one or more copies of this booklet by return mail.

PRESSED METAL RADIATOR COMPANY
Bailey-Farrell Building Pittsburgh, Pa.

The Clean Way

TO DRINK
IN PUBLIC



The Clow Way

When you drink from the Clow
Bubble you don't wonder if it
is clean—YOU KNOW IT

"HYGIENE" Drinking Fountain

(Adamantose Ware)

All bubble cups are "law-proof,"
but very few are germ-proof.
The Clow "Madden Patent"
Drinking Cups are both



Send for Bubble Cup
Fountain Catalogue

JAMES B. CLOW & SONS

CHICAGO



"Bayonne" Canvas Roofing

Guaranteed

**Waterproof—Windproof—
Weatherproof**

Bayonne Roof and Deck Cloth stands for the **best "buy"** in porch roof and deck covering. This specially treated canvas requires but one coat of paint.

**BAYONNE
ROOF AND DECK
CLOTH**

Architects Specify It.

Because it is both durable and economical—costing less than the ordinary roof and deck covering—and is easy to lay, it is used by carpenters and builders everywhere.

*Send for Booklet R for full information
on Bayonne Roof and Deck Cloth.*

John Boyle & Co., Inc.

112-114 Duane St. 70-72 Reade St.
New York City

**"50 years' Experience back of Boyle's
Products"**



Is the seat that you are specifying up to the standard of your specifications?



Is it labeled
with a Trademark
that guarantees it for
five years against
cracking or splitting?



Are the joints
held together by
Bolts, Nuts and
Washers?



The
Seat
With the
Bolted
Joints

Is there any reason
why they should not
be guaranteed with
such construction

?

Is its finish that of a
piano, and a lasting
one?

Such are

**NEVER SPLIT
SEATS**

*Have you our latest
booklet?*

NEVER SPLIT SEAT CO.
EVANSVILLE, IND., U.S.A.



Ordinary Steel without Copper

Same Steel with Copper

Actual WEATHER Tests of Copper Bearing Steel

Continue to add to the evidence of *durability*. Uncoated sheets in *actual service* under identical conditions is the proof. If you have not read "COPPER IN STEEL—the Influence on Corrosion" send for a copy. It gives the whole story in pamphlet form, with tables and analysis. *Absolute PROOF of service.*

We Use Copper Bearing Open Hearth Steel Exclusively for Roofing Tin.

Demand plates that bear the stamp "C. B. OPEN HEARTH" in addition to the brand and weight of coating. You should use no other. Write for full information on our Tin and Terne Plates, Apollo Best Bloom Galvanized Sheets, Black Sheets of every description, Formed Metal Roofing and Siding Products, Etc.

American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

DISTRICT SALES OFFICES:

Chicago Cincinnati Denver Detroit New Orleans New York Philadelphia Pittsburgh St. Louis
Export Representatives: UNITED STATES STEEL PRODUCTS COMPANY, New York City.
Pacific Coast Representatives: UNITED STATES STEEL PRODUCTS COMPANY, San Francisco, Los Angeles, Portland, Seattle.

*"There's Lasting Class
in MUELLER Brass"*

As Serviceable as it is Attractive

MUELLER Self-Closing Work

It is generally conceded that MUELLER Self-Closing Work is the most attractively designed that the market affords. But, although beauty is usually the dominating feature in the selection of any article it is ACTUAL SERVICE THAT COUNTS.

MUELLER Self-Closing Work measures up in serviceability exactly proportionate to its attractiveness. And this means the utmost to be obtained in self-closing work at any price.

Why MUELLER Self-Closing Work is UNCONDITIONALLY GUARANTEED

Only the best grade red metal is used. Friction is practically eliminated. Every cock and bibb is rigidly inspected and then tested under 200 lbs. hydraulic pressure before it leaves our factory. And that's the reason why we always make an Unconditional Guarantee.

Send for Booklet A-3. Don't Delay

H. MUELLER MFG. CO.

DECATUR, ILL.
New York City Chicago
San Francisco



D-12901

Your Clients' Comfort Brings More Business

Every client that you satisfy will sell your services to his friends. And there is no more certain way of satisfying your clients with the way you insulate their buildings than by specifying that Keystone Hair Insulator shall be used between the walls and floors. That Keystone is the most efficient material for deadening sound and preventing the transmission of heat and cold we can quickly prove to you.



Keystone Hair Insulator

consists of a heavy layer of cattle hair, cleansed and sterilized, securely fastened between two sheets of strong, non-porous building paper. It is an effective fire retardant. Is inodorous and vermin proof.

Get samples and catalog from our nearest House.

H. W. JOHNS-MANVILLE CO.

MANUFACTURERS OF ASBESTOS
AND MAGNESIA PRODUCTS

ASBESTOS

ASBESTOS ROOFING, PACKINGS,
ELECTRICAL SUPPLIES, ETC.

Albany
Baltimore
Boston
Buffalo

Chicago
Cincinnati
Cleveland
Dallas

Detroit
Indianapolis
Kansas City
Los Angeles

Louisville
Milwaukee
Minneapolis
New Orleans

New York
Omaha
Philadelphia
Pittsburgh

San Francisco
Seattle
St. Louis
Syracuse

Toronto

Montreal

THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED,
Winnipeg, Vancouver

1781

YOU ARE NOT EXPECTED TO BELIEVE THAT

Monarch Architectural Varnishes

are the BEST, simply because we say so, but we would like you to remember this one fact:—

In each can of **MONARCH VARNISHES** we, as its manufacturers, MUST put enough quality to uphold a reputation that has extended over a period of EIGHTY-SEVEN YEARS. Should we offer a poor grade of goods under the name of MONARCH we would immediately jeopardize that reputation, the maintenance of which has cost us nearly a century of conscientious work.

Is it likely then that we should risk this good name for the sake of the small extra profit through inferior goods?

Our reputation is your guarantee for quality.

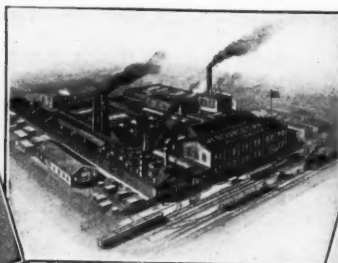
CHAS. H. GILLESPIE & SONS

ESTABLISHED 1824

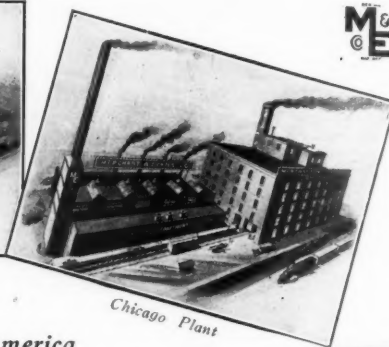
131-159 Dey Street, Jersey City, N. J.



Warwood Works, Wheeling, W. Va.



Philadelphia Plant



Chicago Plant

ESTABLISHED 1864

The Premier Metal House in America

Three Plants and Eight Warehouses

This is self evident proof of the demand for Merchant & Evans Company's products

SPECIALTIES

"Star" Ventilators, Metal Shingles and Tiles.

SMELTING

Printing and Type Metals, Babbitt, Solders, All Soft Alloys and Pig Metals.

TIN PLATE

Bright, Roofing and Fire Door, "Florence" (Bright), "Merchant's Old Method," "Copmett" and all other grades of Roofing.

BRASS AND COPPER

Sheets, Rods, Wire and Tubes, all forms.

MECHANICAL

"Hele-Shaw" Clutches, "M & E" Grease Cups, "Star" Tire Cases, Alignment Joints.

FIRE PREVENTION AND ENGINEERING

Engineering Advice, Evans' Automatic Sprinklers and Stand Pipe Systems.

GENERAL

Sheet and Galvanized Steel and Iron. Everything in Metals.

IMPORTS

We import all these lines not made in the United States or purchasable abroad to advantage.

MERCHANT & EVANS COMPANY



PHILADELPHIA
CLEVELAND

NEW YORK
CHICAGO

BROOKLYN
KANSAS CITY

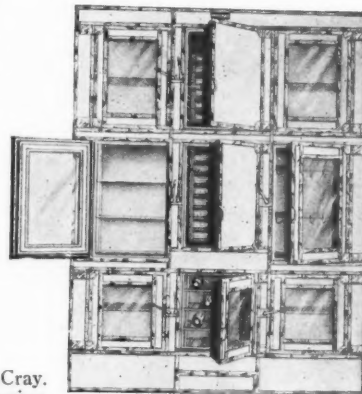
BALTIMORE
WHEELING



Works: PHILADELPHIA, WHEELING AND CHICAGO

An Architect's Refrigerator

The McCray is built as a good architect wants a house built—with great care in selection of materials and great skill in putting them together in a way most useful, convenient, healthful and pleasing to the owner. For the finest type of residences, stores or institutions foremost architects specify



McCRAY REFRIGERATORS

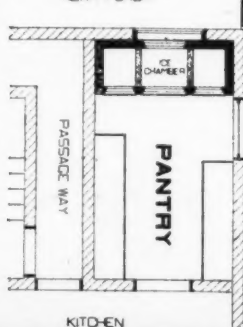
There is never any doubt about quality or efficiency when you install the McCray. They are standard the country over because they combine every feature for keeping foods fresh as well as cold. There is no soggy stagnant odor in the McCray. A constant flood of dry, cold, lively air reaches every nook and corner and keeps provisions always fresh and sweet. Best and easiest cleaned linings of opal glass, porcelain,

enamel and odorless white wood—handsome and strong construction.

The arrangement for convenient outside icing is a much appreciated feature.

Send rough floor plan and dimensions and our free design service will co-operate with you thoroughly and furnish you with blue prints, help you with specifications and solve any refrigerator problems which may confront you.

Send for any of the following catalogs:



Built to order for residences
For groceries
For flower shops

No.
A. H.
69
73

For meat markets
Regular sizes for residences
For hotels, clubs, institutions

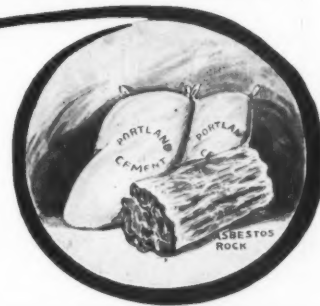
No.
60
90
49

McCray Refrigerator Co.
507 Lake St., Kendallville, Ind.

New York Branch, 231 West 42nd St.

Chicago Branch, 158 N. Wabash Ave.

An artistic roof that never wears out—



J-M Transite Asbestos Shingles

combine artistic beauty of the highest order with wearing qualities that are not found in any other roofing.

As these shingles are made of Asbestos fibre and Portland Cement, moulded into a homogeneous mass under tremendous hydraulic pressure, they are virtually solid stone. They never split, warp, or crack. Never require coating of any kind to preserve them, and are

proof against fire, water, acids, gases, salt air and all weather conditions. Time and exposure only tend to make them harder and tougher. They never wear out!

Made with rough and smooth edges, $\frac{1}{8}$ and $\frac{1}{4}$ inch thick, in a large variety of shapes and sizes. Colors: Indian red, green, slate and natural gray.

Ask our nearest Branch for Samples and Illustrated Booklet

H. W. JOHNS-MANVILLE CO.

MANUFACTURERS OF ASBESTOS
AND MAGNESIA PRODUCTS.

ASBESTOS

ASBESTOS ROOFINGS, PACKINGS,
ELECTRICAL SUPPLIES, ETC.

Albany
Baltimore
Boston

Buffalo
Chicago
Cincinnati

Cleveland
Dallas
Detroit

Indianapolis
Kansas City
Los Angeles

Louisville
Milwaukee
Minneapolis

New Orleans
New York
Omaha

Philadelphia
Pittsburgh
San Francisco

Seattle
St. Louis
Syracuse

THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED,

Toronto

Montreal

Winnipeg

Vancouver

2039

EUREKA LINEN FIRE HOSE



Architects, Builders and Contractors can specify our brands of **Eureka Best** and **Eureka 20th Century** with absolute assurance that they will fully protect their Clients' interests.

Our Linen Hose is circular woven (the shape it assumes when being used)—and not flat woven. It has given unparalleled service in large office buildings, factories, hospitals and institutions throughout the world.

We invite inquiries for prices and samples.

Eureka Fire Hose Mfg. Co., New York

Atlanta, Ga.
Boston, Mass.
Chicago, Ill.

Columbus, Ohio
Kansas City, Mo.
Denver Colo.

Minneapolis, Minn.
Philadelphia, Pa.
San Francisco, Calif.

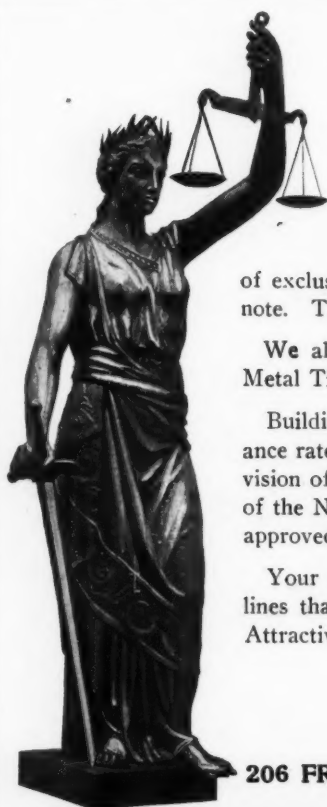
Spokane, Wash.
Syracuse, N. Y.

Rather not
who, but
how many.

Every Architect is pestered to death when an important building project comes up, by numerous representatives who try to argue and induce him into the specification of their particular line of goods. As far as the plumbing goes the remedy is simply

The Trenton Potteries Company

Jobbers of Plumbing and Specialty Houses don't try to shift such specifications. They are content because they know they have an equal opportunity of securing the order through the Plumbing Contractor. There can be no boosting of prices because of specification, for competition is created **on the same goods**. Before starting you know the sanitary pottery to be the best which can be made.



MULLINS Sheet Metal Statuary

fulfils every requirement of ideal architectural adornment. Its effect is nothing short of imposing. It is light—withstands the ravages of time. Made from artists own models, or can be selected from our great variety of exclusive stock designs. Has the hearty endorsement of numerous sculptors of note. The cost is far below that of cast or sculptured work.

We also manufacture Fireproof Metal Windows, Skylights, Cornices, Finials, Metal Tile Roofing, and Sheet Metal Ornamental Work of every description.

Buildings that are equipped with Mullins Fireproof Windows have lower insurance rates because Mullins Fireproof Windows are manufactured under the supervision of the Underwriters' Laboratories, Inc., according to the latest specifications of the National Board of Underwriters. Every one of these windows is inspected, approved and labeled with the official approval of that board.

Your written request will bring, by return mail, catalogues covering the line or lines that interest you. Glad to submit quick estimates on architects' drawings. Attractive prices. Prompt service. Special discounts to the Trade. Write to-day.

THE W. H. MULLINS CO.

206 FRANKLIN STREET

SALEM, OHIO

An example of the remarkable strength of a J-M Asbestos Stucco House

Illustration shows a J-M Asbestos Stucco House which stood directly in the path of the tornado that recently swept the city of Omaha. The exterior of this house remained practically intact, whereas nearly every other house on the same street, for a distance of two blocks, was damaged almost beyond repair.

In spite of the extreme discoloration of the stucco, due to the deluge of dust and dirt, it was quickly restored to its original gray-white shade by washing down.

Could you ask for any stronger proof of the quality and durability of J-M Asbestos Stucco?



Home of Mr. Lee Huff, 39th and Chicago Streets, Omaha, Nebraska

Write nearest Branch for Sample and Booklet.

H. W. JOHNS-MANVILLE CO.

MANUFACTURERS OF ASBESTOS
AND MAGNESIA PRODUCTS.

ASBESTOS

ASBESTOS ROOFINGS, PACKINGS,
ELECTRICAL SUPPLIES, ETC.

Albany
Baltimore
Boston

Buffalo
Chicago
Cincinnati

Cleveland
Dallas
Detroit

Indianapolis
Kansas City
Los Angeles

Louisville
Milwaukee
Minneapolis

New Orleans
New York
Omaha

Philadelphia
Pittsburgh
San Francisco

Seattle
St. Louis
Syracuse

THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED

Toronto

Montreal

Winnipeg

Vancouver

2070



Shield the Buildings You Plan or Erect From Hanger Troubles

Eliminate the dissatisfaction which is inseparably linked with improperly constructed Door Hangers. Shield the buildings you plan or erect from Hanger Troubles for all time to come by specifying or installing the R-W Brand.

R-W DOOR HANGERS

render satisfactory service through years of hard usage. Never get out of whack—require no tinkering. Operate easily and noiselessly. Embody all desirable improvements and conveniences. Constructed from the best, the *most durable* materials obtainable. Built by skilled mechanics who have devoted years to the art of fashioning and constructing Door Hangers.

Catalogue No. 10 (Special Architects Edition)
sent on request.

Richards-Wilcox Mfg. Co.
Aurora, Ill.

RICHARDS-WILCOX
CANADIAN CO., LTD.,
LONDON, ONTARIO

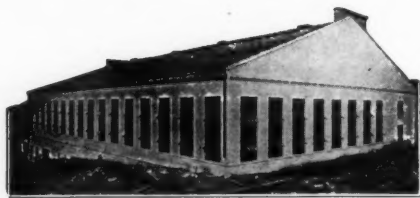
Royal Ball Bearing Trolley House Door Hanger

High Grade full trolley Hanger designed for fine residences, apartments, etc., perfectly noiseless, hard maple runway Ball Bearing wheel, center hung with weight evenly distributed. Adjustment in both hanger and track. Track can be easily removed after walls are plastered. Wood header furnished with track.



No. 122

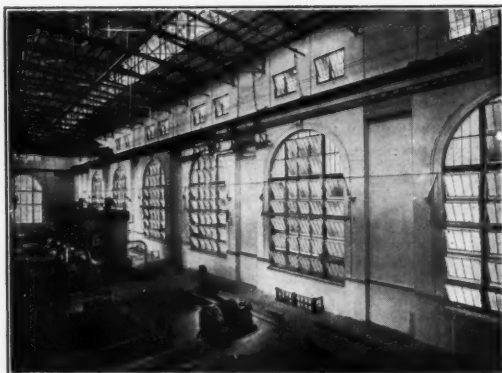
For Maximum Efficiency—Specify



Lupton Steel Sash, Standard Construction.



Pond Continuous Sash in Sawtooths.
Lupton Steel Sash in Side Walls.



Lupton Steel Sash, Power House Type, Sash in the Six
Openings Are Controlled from One Power by
Pond Operating Device.



Lupton Steel Partitions.

Lupton Products

each of which is highly developed in every detail and is constructed for strength, simplicity and permanency.

Behind the Lupton Products is Lupton Service—expert advice on matters pertaining to daylighting and natural ventilation of all kinds of buildings, always freely at your service.

Lupton Steel Sash are made of solid rolled steel members with storm and draft-proof ventilators. In addition to our standard construction we manufacture sash of special construction to meet various requirements, such as Lupton Steel Sash, Power House Type, a unit sash 100% ventilating; Counterbalanced Type, particularly adapted for Forge Shops and Foundries; Projected Ventilator Type, which swings out and does not interfere with use of screens or shades; special sash with circular or camber heads or other ornamental features.

Pond Continuous Sash, made of solid rolled steel members, with all joints welded, gives unequal results in monitor and sawtooth construction because it is weathertight open or closed and permits ventilation at all times without exposing the interior of the building.

Pond Operating Device entirely different in mechanical principle from any other sash operating device. Power is transmitted by tension without loss from friction. Gears are immersed in Albany grease; hinged connections have phosphor bronze bearings. Working conditions are permanent; vibration or settling of building do not affect the device.

These and other Lupton Products are illustrated and described in our catalogue, a copy of which should be in your files.

David Lupton's Sons Co.

Trenton Ave. and Allegheny Ave.

Philadelphia

Sales Offices: Chicago—New York—Pittsburgh

Canadian Manufacturers:

A. B. Ormsby, Ltd., Toronto

The Knowledge of Security

RAYMOND PILES are not alone different in shape from any other made-in-place pile, but they are driven differently, more quickly, more economically and more securely.

The RAYMOND SYSTEM affords inspection of each progressive step in the construction of the foundation and because every step in the process is known to be perfect, the entire foundation is perfect—beyond question.

Actually, RAYMOND PILES are not driven—they are built in the ground. First, a spirally reinforced steel shell is driven to refusal by means of a collapsible steel core. The core is then withdrawn, the shell illuminated and inspected to make certainty absolute—then the concrete is placed within the shell and the shell remains permanently in the ground.

Our engineering corps will gladly cooperate with architects on proposed work. An expert will visit the site of the building, make an examination of the conditions and upon the information gained will collaborate with the architect and draw plans for a foundation that will provide absolute assurance of carrying the load.

Booklet describing the RAYMOND SYSTEM of Concrete Piles, together with photographs of prominent buildings supported on them, sent on request.



Kenyon Theatre Building, Pittsburgh
N. Nirdlinger, Architect.



This shows the mandrel which receives the blow of the hammer, saving the shell from injury.

With the RAYMOND SYSTEM the succeeding piles may be immediately driven. The spirally reinforced steel shell affords absolute protection to the concrete against distortion due to back pressure of the soil or the driving of adjacent piles.

"LISTED IN SWEETS"

Raymond Concrete Pile Company

Engineers and Contractors

NEW YORK and CHICAGO

Baltimore Pittsburgh St. Louis San Francisco Portland, Ore. Philadelphia Cleveland Detroit Kansas City

Raymond Concrete Pile Company of Canada, Ltd., Montreal

A form for every pile—A pile for every purpose

Circular No. 10

gives all the facts covering Patent Decisions handed down May 12th, 1913, by the

Court of Appeals for the Second Circuit

conferring upon us the exclusive right to manufacture an Automatic Water Heater having

A Double Fuel Control

1 Gas Valve controlled by the water pressure,
1 Gas Valve controlled by the water temperature, and having a

Burner with a Flat Gauze Flame Check

held between plates in a vertical or a partially inclined position.

Circular No. 10

contains the conclusions of the Court expressed in a very simple, clear, concise manner. If your copy goes astray, write

Ruud Manufacturing Co.
Pittsburgh, Pa.

Like the other "Tallest Buildings"

Union Central Building CINCINNATI, OHIO

Equipped with Twelve
High Speed Otis Elec-
tric Elevators

Cass Gilbert
Garber & Woodward
Associate Architects



This Union Central Building, now the tallest in the world outside of New York City—provides for rapid and reliable transportation between floors by using twelve high speed

Otis Elevators

There are thirty-eight stories to this structure, bringing its total height up to 549 feet with 216,437 sq. ft. of rental space.

It is an interesting indication of the spread of skyscrapers throughout the country—the popular and practical form of “office homes” for which Otis Elevators are primarily responsible.

Your inquiries concerning any types of freight or passenger elevators are earnestly invited. All of our ninety offices throughout the United States are ready to help you without obligating you in any way.

Otis Elevator Company

Eleventh Ave. and Twenty-Sixth St.
NEW YORK

Offices in all Principal Cities of the World



AMERICAN NATIONAL BANK BUILDING, RICHMOND, VA.

Messrs. Wyatt and Nölting, Architects, Baltimore. Thomas W. Power Engineering Co., Consulting Engineers, Washington, D. C.

An Automatic Refrigerating Plant cools the drinking water for this building and refrigerates the kitchen boxes in Club Rooms on top floor.

AUTOMATIC WATER COOLING

For Office Buildings—

A properly designed Modern Office Building must in these times be provided with a system of cooled drinking water—not ice water, but water at just the right temperature, but no mussy germ laden ice. Tenants who pay high rent demand high service.

Water held at exactly the desired temperature by an *AUTOMATIC* Refrigerating plant will please Tenants. *Satisfied Tenants* help the *Rent Roll*. *Heavy Rent Roll* pleases *Owner*.

The Owner is your Client and when he is pleased is your Best Advertisement.

Let us help your Reputation grow.

THE AUTOMATIC REFRIGERATING COMPANY

Main Office and Works: HARTFORD, CONNECTICUT

We are the ONLY builders of AUTOMATIC Refrigerating Plants and are thoroughly protected by Patents.

To Lay a Concrete Floor Right Expert Supervision is Needed

The most vital period of a concrete floor is the making—the period when its life is determined entirely. So to insure success, *expert supervision* is an absolute necessity in the laying of a concrete floor.

Lay it right—under the trained eyes of an expert—by a scientific method—and a concrete floor won't crumble. It won't require patching. It won't float through the air in a continuous shower of dust, to the injury of fine machinery, delicate fabrics, food products, etc.

Such supervision you get with

Master Builders Method

AMERICAN PATENT DEC. 26TH 1911. TRADE MARK REG. U. S. PAT. OFFICE CANADIAN PATENT APRIL 23RD 1912
PATENTED IN ENGLAND OCT 10TH 1912.

For Making Wearproof, Dustproof and Waterproof Concrete Floors

You get a Master Builders Service Man—an expert in Concrete Floors. He will be on the job at the start, to see that the floor is laid *right*—to eliminate every chance of failure. His presence is a guarantee of a good concrete floor.

In addition to this Service, Master Builders Method also supplies a Material that produces the hardest, most wear-resisting, concrete floor known. This is Master Builders Concrete Hardner, a fine powder that is mixed with the sand and cement in the topping of the floor, making it Wearproof, Dustproof and Waterproof.

No patching, no temporary loss of operating capacity—Master Builders Method indeed costs less in the long run. Millions of feet are now in use—the floors themselves are their own best recommendation. Here are a few installations:

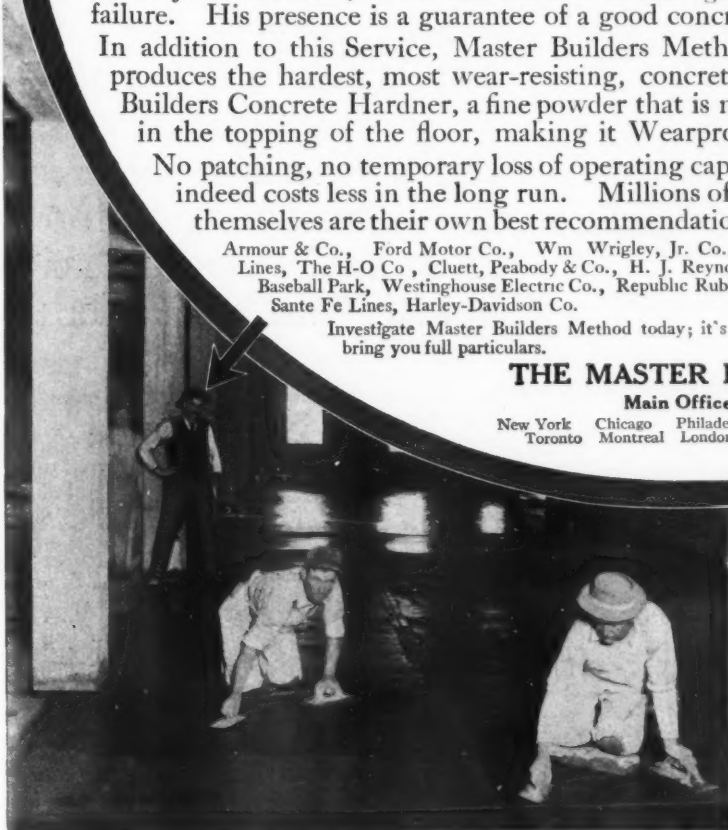
Armour & Co., Ford Motor Co., Wm Wrigley, Jr. Co., New York Central Lines, General Electric Lines, The H-O Co., Cluett, Peabody & Co., H. J. Reynolds Tobacco Co., Prestolite Co., Philadelphia Baseball Park, Westinghouse Electric Co., Republic Rubber Co., Heinz & Co., Canadian Pacific R.R., Sante Fe Lines, Harley-Davidson Co.

Investigate Master Builders Method today; it's worth a minute and a stamp. The coupon will bring you full particulars.

THE MASTER BUILDERS COMPANY

Main Office and Works, Cleveland, Ohio

New York Chicago Philadelphia Detroit St. Louis Buffalo Minneapolis
Toronto Montreal London, W. C. Amsterdam Sydney Fredrikshald, Norway



(Fill out this Coupon and Mail it to us
—Do it Now)

THE MASTER BUILDERS CO.,
Service Dept., Cleveland, O.

(Am. Arch. 7 2)

Please send me, without obligation, literature and full particulars regarding your Method and service.

Name
(Individual)

Firm Name

Address

The Underwriters' Standard



*Triple Elevator Doors in Hopewell Hospital, Minneapolis
Hewett & Brown, Architects*

for fireproof doors is based on a three ply built up wood core covered with sheet tin locked on.

The Thorp way of interpreting this specification is to line the three ply wood core with heavy sheet asbestos and cover the wood and asbestos with good 24 gauge sheet steel locked on by patent process.

The sheet steel is then heavily copper plated to add elegance of appearance and prevent all rust damage. If it is desired to preserve the harmony of interior finish, the doors are grained to match the wood work.

For ornamental entrance doors we use pure copper or bronze and make a fireproof door which conforms to all the niceties of the architect's designs.

The protection afforded is a wonderful equivalent for the slight additional cost over ordinary exterior and interior doors. Remember—Thorp Fire Proof Doors "make each room a separate building." The fire can't spread.

THORP FIRE PROOF DOOR CO.

Minneapolis, Minnesota



Self-Senter Your Ceilings

Even where the beams or other supports are altogether too far apart to permit the use of ordinary metal lath without cross furring, you can easily put up the best type of a suspended fireproof ceiling with

SELF SENDERING

Self-Sentering acts as both lath and furring. The heavy ribs take the place of the small channels or angles usually necessary with metal lath. The diamond mesh connecting fabric forms a perfect plastering surface.

The saving in time and material effected in suspended ceiling work by the use of Self-Sentering makes it by far the most economical type of fireproof ceiling.

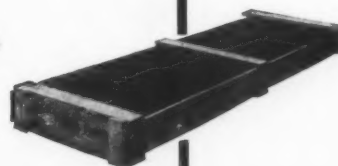
Self-Sentering comes in sheets 28 inches wide and up to 12 feet long, and can be curved in the factory for arched construction to any radius desired.

Write for our 96-page Fireproofing Handbook. (Published for Architects, Engineers and Contractors.)



The General Fireproofing Co.

2702 LOGAN AVENUE
YOUNGSTOWN, OHIO



Carey Flexible Cement Roofing

Iron Mountain R. R.
Round House



Philadelphia & Reading Terminal



Big Four Round House, Brightwood, Ind.



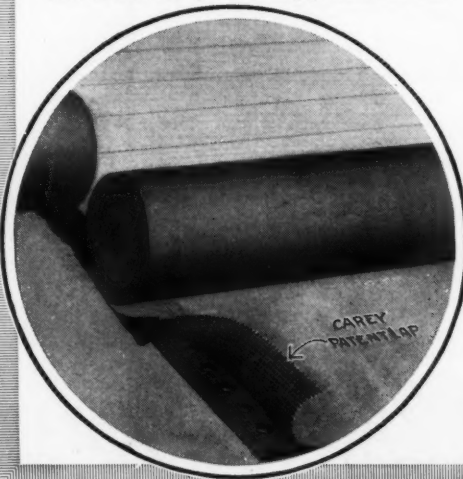
Schill Bros. Foundry, Crestline, O.

Specify Insured Roofing

When you specify Carey Flexible Cement Roofing you insure absolute roof insurance for the life of the building.

After exhaustive tests by the National Fire Protective Association, Carey Flexible Cement Roofing has been approved by all Insurance Companies, and given the lowest rates.

Note how the Carey Patent Lap protects the nails



Twenty years of the most severe service on Foundries, Dry Kilns, Factory Buildings, Round Houses, Train Sheds, etc., indisputably proves that Carey Roofing represents the last word in roof durability.

Carey Roofing guarantees permanent roof satisfaction because of the permanently flexible tempered asphalt body which cannot dry out and crack, and the Carey Patent Lap that permanently safeguards the nail heads from rust.

Our book "Facing the Facts about Roofing" contains valuable ideas and building aids for contractors; write for a copy.

THE PHILIP CAREY COMPANY

General Offices and Factory

98 Wayne Avenue, Lockland, Cincinnati, O.

Allentown, Pa.,	Cleveland,	Knoxville,	Philadelphia,	Spokane,
Atlanta,	Dallas,	Little Rock,	Pittsburgh,	St. Louis,
Baltimore,	Denver,	Los Angeles,	Portland,	Syracuse,
Birmingham,	Detroit,	Memphis,	Richmond,	Toledo,
Boston,	Harrisburg,	Minneapolis,	Rochester,	Toronto,
Buffalo,	Hartford, Conn.,	Montreal,	Saginaw, Mich.	Wheeling,
Charlotte,	Houston,	Nashville,	San Francisco,	Winnipeg,
Chattanooga,	Havana,	New Orleans,	Scranton,	Washington,
Chicago,	Jacksonville,	New York,	Seattle,	Youngstown,
Cincinnati,	Kansas City,	Oklahoma City,		



SARGENT
HARDWARE

THE ADLON
S. W. Cor. 54th St. and 7th Ave.
New York

GEO. & EDW. BLUM
Architects

THAT the "multiple-home building," a distinctly modern development, should be equipped in constantly increasing numbers with **SARGENT** hardware, in the design, manufacture and distribution of which the most modern methods are employed, seems peculiarly fitting.

SARGENT & COMPANY

Manufacturers of Hardware for more than 60 Years.

NEW HAVEN, CONN. NEW YORK BOSTON PHILADELPHIA CHICAGO

SARGENT HARDWARE is obtainable through representative hardware merchants in all cities

"THE SPIRIT OF 1776"

Laid the foundation of the world's greatest nation, also fostered the beginning of a nation-wide use of

Southern Yellow Pine

(The Wood of a Thousand Uses)

An important discovery reveals the interesting and significant fact that this famous wood was used for the finish of Independence Hall, that historical old building, erected in 1729, where the Continental Congress met and appointed George Washington Commander-in-chief of the American army, where the Declaration of Independence was written and signed, and from the tower of which the Liberty Bell pealed forth its message to the world.

This letter from a prominent Philadelphia architect is self-explanatory:

MEMBER AMERICAN INSTITUTE OF ARCHITECTS.

CHAPTER MEMBER AMERICAN INSTITUTE OF ARCHITECTS

STRUCTURAL ENGINEERING, MECHANICAL EQUIPMENT,
PLANS, SPECIFICATIONS, SUPERINTENDENCE,
EXPERT EXAMINATIONS AND REPORTS,
BUILDINGS, FOUNDATIONS.

COMMERCIAL UNION BUILDING,
SEVENTH FLOOR
419 WALNUT STREET

OFFICE OF
WILLIAM COPELAND FURBER,
ARCHITECT CONSULTING ENGINEER.

PHILADELPHIA, June 12, 1913

Yellow Pine Manufacturers' Association,
St. Louis, Mo.

Gentlemen:-

I beg to acknowledge receipt of your letter of the 9th instant and to confirm the statement I made that in the repairs being made to Congress Hall, at the corner of Sixth and Chestnut Streets, Philadelphia, (which is one of the Independence Hall group of buildings) I observed, that the wood around the door-ways on the Chestnut Street front was Yellow Pine.

The painters were burning off the old paint preparatory to repainting it, and I was somewhat surprised to see that Yellow Pine had been used in this early date as a finishing wood.

Very truly yours,



WCF/S

The wisdom of the founders of our nation in writing the Declaration of Independence is recognized by the world. **Equally great was their wisdom in the choice and use of Southern Yellow Pine, THEN, AS NOW, THE BEST—the standard structural and finishing wood of America.**

No service is harder on wood than in door frames, where it is constantly exposed to extreme variations of temperature, dryness, and moisture. Yet after **nearly two centuries**, the Yellow Pine used here is in perfect condition—sound, and bright as new, and almost as hard as flint.

"Ready-to-use" Yellow Pine lumber is handled by lumber yards and building supply dealers everywhere. Architect's designs worked from rough yellow Pine finishing lumber by planing mills. Write for Grading Rules, finished samples, or further information. Mention this paper.

Yellow Pine Manufacturers' Association

711 Wright Building, St. Louis, Mo.



A Dining Room of Charm and Character Decorated with Straight Dutch Boy Lead and Oil.

THREE COATS OF PAINT

each consisting of pure white lead and pure linseed oil applied to a perfectly dry surface, each coat being allowed to dry thoroughly before the next one is applied, will give a job from which no trouble need be feared.

White lead and oil paint may be tinted any color excepting the more sombre shades.

We recommend *Dutch Boy* white lead and *Dutch Boy* linseed oil (in sealed one and five-gallon cans), because they are absolutely pure. We stand back of both of these products, which bear our Dutch Boy trade-mark, with an unconditional guaranty.

You are perfectly safe in specifying them in all your work.



NATIONAL LEAD COMPANY

NEW YORK
CINCINNATI

BOSTON
CLEVELAND

BUFFALO
ST. LOUIS

CHICAGO
SAN FRANCISCO

(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)





Marshall & Fox
Architects



Carl J. Stein
Plbg. Contractors

The Lytton Building (The Hub) Chicago

The above building is equipped throughout with Wolff Plumbing Goods. These goods have done much toward bettering sanitary conditions in stores, offices and public buildings.

Over fifty-eight years' experience in the manufacture of plumbing goods enables us to supply the largest buildings with the most sanitary and practical fixtures.

L. Wolff Manufacturing Co.

MANUFACTURERS OF

Plumbing Goods Exclusively

The one line that's complete—
completely made by one.

General Offices: 601-627 West Lake Street
Showrooms: 111 North Dearborn Street
CHICAGO

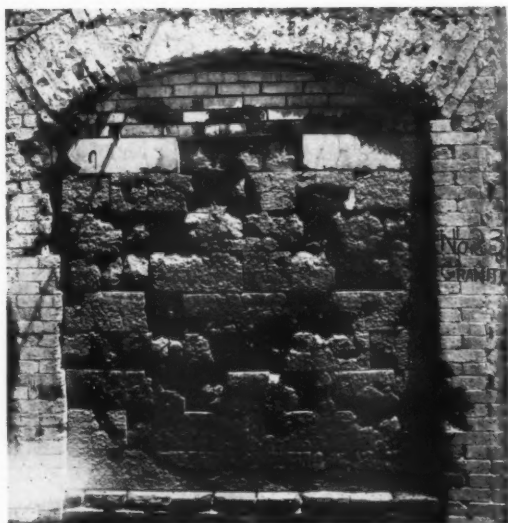
Potteries: Trenton, N. J.

BRANCHES:

Denver,	Colo.
Omaha,	Neb.
Minneapolis,	Minn.
Dallas,	Texas
Rochester,	N. Y.

BRANCH OFFICES:

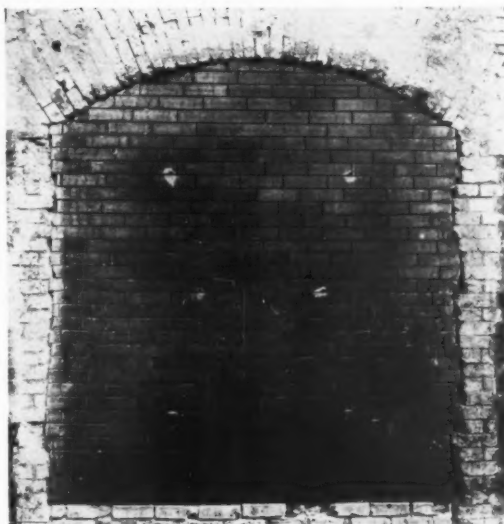
St. Louis,	Mo.
Washington,	D. C.
Cleveland,	Ohio
Cincinnati,	Ohio
Kansas City,	Mo.
San Francisco,	Cal.



Panel of granite blocks after passing through same tests of firing and quenching as were applied to Hy-tex panel below.

These illustrations are reproduced from Bulletin 370 U. S. Geological Survey, by courtesy of Bureau of Standards, Washington, D. C.

Panel of Hy-tex Brick after firing at 1580° Fahrenheit followed immediately by quenching with water at 36°. The most exhaustive fire tests, made by the Government, showed Hy-tex Brick the *most* fire-resistive of all building materials tested.



This test establishing the fire-safety of

Hy-tex Brick

is more fully described in our new beautifully illustrated booklet "Genuine Economy in Home Building." We should like to have a copy of this booklet in every architect's office. Won't you send for it?

HYDRAULIC-PRESS BRICK COMPANY

Dept. V7. ST. LOUIS, MISSOURI

BRANCH OFFICES:

BALTIMORE, MD., 11 E. Lexington St.
CHICAGO, ILL., Chamber of Commerce Building
CINCINNATI, O., Fourth National Bank Building
CLEVELAND, O., Schofield Building
DAVENPORT, IOWA, Putnam Building
INDIANAPOLIS, IND., Board of Trade Building

WASHINGTON, D. C., Colorado Building

KANSAS CITY, MO., Rialto Building
MINNEAPOLIS, MINN., 221 S. Fourth St.
NEW YORK CITY, 381 Fourth Ave.
OMAHA, NEB., Woodmen of the World Building
PHILADELPHIA, PA., Real Estate Trust Bldg.
TOLEDO, OHIO, Ohio Building

Bethel White Granite



Connecticut State Library, Hartford, Conn.

Mr. Donn Barber, Architect

For public buildings of impressive, monumental design, Bethel White Granite is the choicest stone that can be specified. It combines the whiteness of marble with the endurance of granite.

Bethel White Granite is extremely hard, with a crushing strength of 33,153 lbs. per square inch, three times the strength of marble and one-third greater than ordinary granites.

There is nothing in the composition of this stone to cause discoloration. It will hold its beauty for years.

We have the largest quarries and finishing shops in the trade. This means quick deliveries.

WOODBURY GRANITE COMPANY

HARDWICK, VERMONT

GEORGE H. BICKFORD, General Manager *

*No. 15.

170 Quarts Of Nitroglycerine Could Not Crack This Piece Of

"NATIONAL" PIPE



¶ Most unusual proof of the toughness and well-nigh indestructibility of "NATIONAL" Pipe has been given by a remarkable accident at Gore, Ohio.

¶ Just before giving a second shot to a 3000 ft. oil well, it was discovered that a joint of the "NATIONAL" Pipe casing*, made of Bessemer steel, had by accident been left in the hole. The shot (consisting of 170 quarts of nitroglycerine) was fired off—with the idea that the joint would be driven out. It was not driven out, however, but stuck about 1500 ft. from the surface—and was later pulled to the top by getting a bell socket over it. And—

¶ This photograph shows what was brought to the surface! The joint had been 18 ft. long; it was reduced to about 8 ft. in length—crumpled, twisted, distorted, but not fractured! The abrasions† that are shown on the joint occurred in wrenching it up to the surface, but are not caused by the "shot."

¶ What would have happened to ordinary pipe? "NATIONAL" Pipe was only twisted!

¶ And that is "NATIONAL" Pipe through and through—amazingly tough, and in fact the most satisfactory pipe you can buy. It is such extraordinary instances as this that bring out the superiority of "NATIONAL" Pipe, show its reserve strength and prove it an absolutely reliable pipe for conditions where ordinary pipe is likely to fail.

¶ Write today for a copy of "MODERN WELDED PIPE"—the book that tells about "NATIONAL" Pipe.

*This casing was sold through National Supply Co.

†The holes shown at one end of the crushed pipe were drilled by the chemist to make the chemical analysis, which indicated the material was Bessemer steel.

¶ To readily identify "NATIONAL" material, and as protection to manufacturer and consumer alike, the practice of National Tube Company is to roll in raised letters of good size on each few feet of every length of welded pipe the name "NATIONAL" (except on the smaller butt-welded sizes, on which this is not mechanically feasible).

MARKING



Name Rolled in Raised Letters on National
Tube Co. Pipe

¶ In addition, all sizes of "NATIONAL" welded pipe below four or five inches are subjected to a roll-knobbling process known as "Spellerizing" to lessen the tendency to corrosion, especially in the form of pitting. This "Spellerizing" process, to which National Tube Company has exclusive rights, is peculiar to "NATIONAL" Pipe.

NATIONAL TUBE CO. Gen'l Sales Offices: FRICK BUILDING PITTSBURGH, PA.

Atlanta
Boston

Chicago
Denver

Kansas City
New Orleans

New York
Philadelphia

Pittsburgh
Salt Lake City

St. Louis
St. Paul

PACIFIC COAST REPRESENTATIVES—U. S. Steel Products Co., San Francisco, Portland, Seattle, Los Angeles.

EXPORT REPRESENTATIVES—U. S. Steel Products Co., New York City.

*This announcement is the fifteenth of a series on "NATIONAL" MODERN WELDED PIPE.

The others appeared as follows:

1—"Main Characteristics of 'NATIONAL' Modern Steel Pipe," May 1, 1912.

2—"Uniformity," June 5, 1912.

3—"Physical Properties," July 3, 1912.

4—"Structure of Wrought Steel and Iron Pipe," August 7, 1912.

5—"Inspection and Marking," September 4, 1912.

6—"Durability," October 2, 1912.

7—"Spellerizing," November 6, 1912.

8—"Durability," December 4, 1912.

9—"Only Full Standard Weight Pipe Made in the Future," January 8, 1913.

10—"N.T.C. Bulletins About 'NATIONAL' Pipe," February 5, 1913.

11—"Spellerizing" and "Marking," March 5, 1913.

12—"The Good Features of 'National' Pipe are brought out in N.T.C. Bulletin No. 12," April 2, 1913.

13—"Some Definite Facts About 'NATIONAL' Pipe," May 7, 1913.

14—"Rational Reasons for 'NATIONAL' Pipe," June 4, 1913.



Court House
Baltimore, Md.

Messrs. Wyatt & Nolting
Architects

Permanency has been the key-note in the selection of all the building material and equipment for this attractive building.

In line with this idea the architects specified MY MARBLE on account of its whiteness, uniformity and quality.

Wherever MY MARBLE is used its beauty and richness add to the architectural lines of any type of building construction.

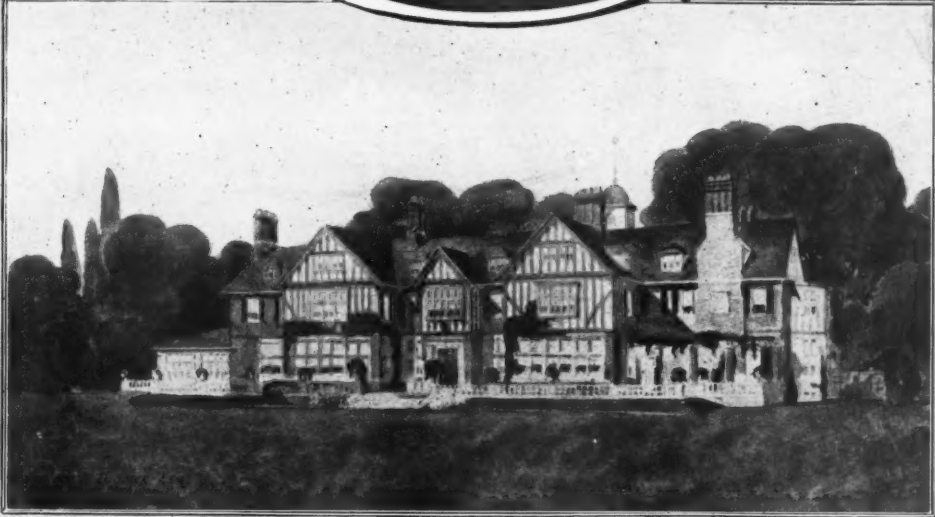
MY MARBLE is reliable and permanent, and is being specified by thousands of architects and extensively used by builders throughout the country.

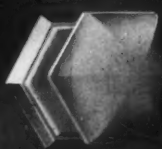
WRITE FOR FURTHER INFORMATION

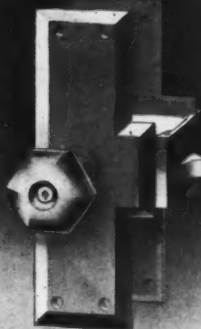
LEE MARBLE WORKS, Lee, Massachusetts

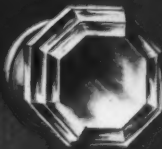
W. H. GROSS, Proprietor










RESIDENCE AT GROSSE POINT, DETROIT, MICH.
 Mac Clure & Spahr, Architects, Pittsburg, Pa.

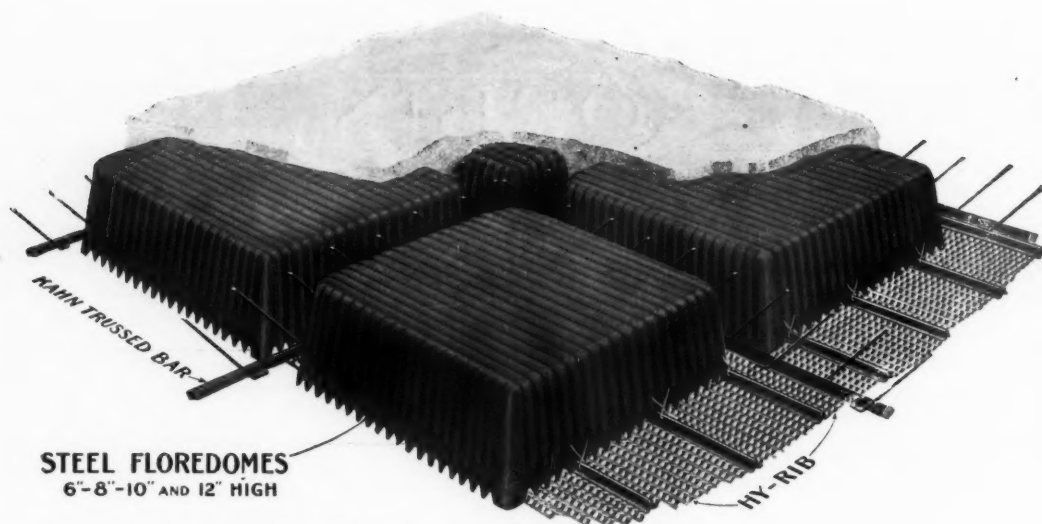
This is an example of what can be accomplished by an intelligent selection of Corbin hardware. The Unit lock, with the key hole in the knob is the highest development of the locksmith's art. The hexagon bronze and octagonal glass knobs with old fashioned key plates are both elegant and in harmony with the general effect.

P. & F. CORBIN
 Division
The American Hardware Corporation
NEW BRITAIN, CONNECTICUT

P. & F. Corbin of Chicago

P. & F. Corbin of New York

P. & F. Corbin Div., Philadelphia



FLOREDOME Construction

Flat Ceilings—Less Weight—Lower Costs

The reinforced concrete joists extend on all four sides of the FLOREDOMES, carrying the loads in two directions to the supports. The joists are deep and narrow so as to require the minimum amount of concrete and steel.

Flat Ceilings are obtained by use of HY-RIB, which extends continuously underneath the FLOREDOMES and provides an ideal surface for plaster.

FLOREDOMES greatly reduce the dead weight of the floor construction and consequently make a material saving in the beams, columns and footings throughout the building.

FLOREDOMES are very stiff and rigid—lighter in weight than terra cotta tile—easier to handle—absolutely water-tight—no breakage—no loss of concrete at joints—save labor—Increase speed—can be shipped anywhere.

FLOREDOMES are rectangular, dome-shaped steel tiles, open on the under side. The deep corrugations on all sides give exceptional stiffness to the FLOREDOMES so as to support the trucking loads coming on them during construction.

FREE! Valuable suggestions, showing how FLOREDOMES can save money on your concrete construction. Write us a brief outline of your proposed work.

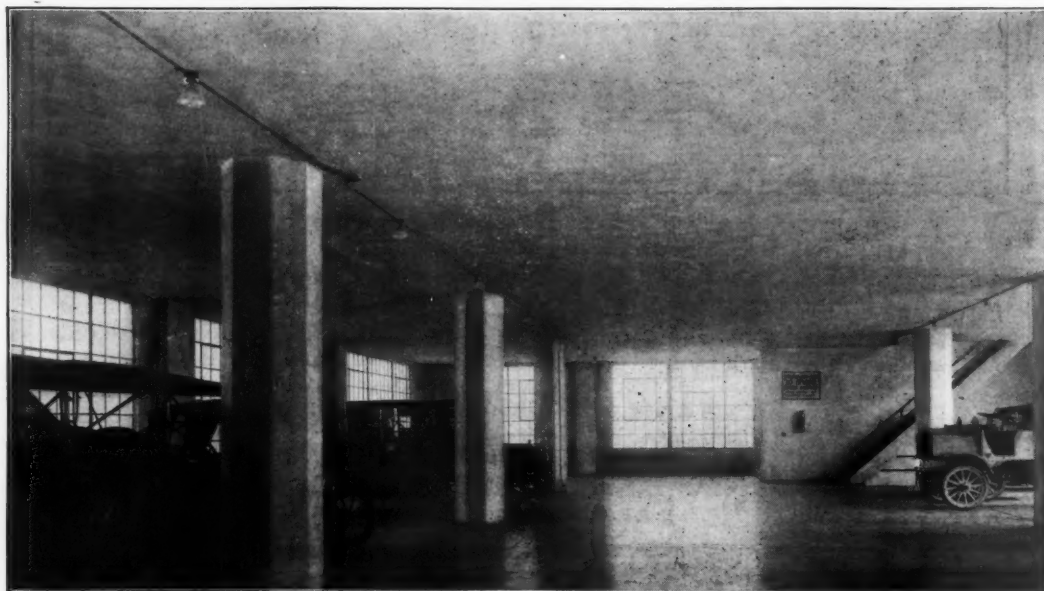


Trussed Concrete Steel Company

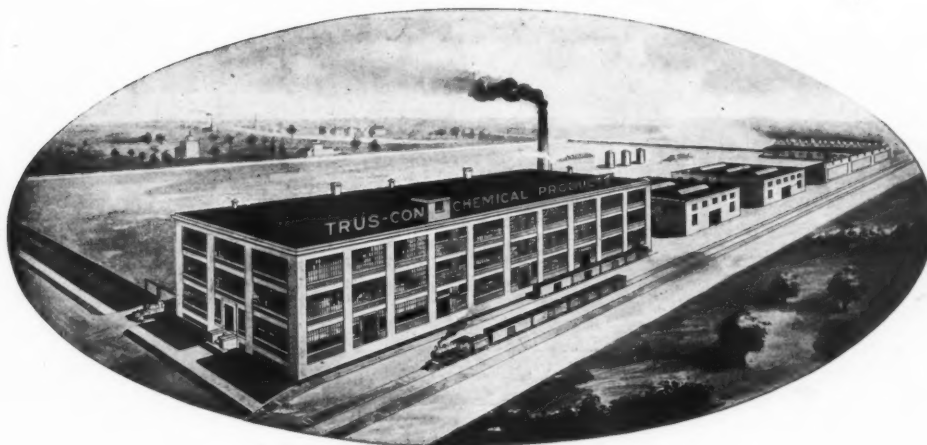
568 Trussed Concrete Building,

DETROIT, MICHIGAN

Reinforced Concrete, Hy-Rib and Lath, Steel Sash, Waterproofings, Finishes, Building Specialties.



Interior of PACKARD SERVICE BUILDING, Los Angeles, Cal. Parkinson & Bergstrom, Archts. F. O. Engstrus Co., Contrs. Flat Ceilings of FLOREDOME Construction. UNITED STEEL SASH used throughout for all Windows.



THE TRUS-CON LABORATORIES, Detroit, Michigan
For exclusive manufacture of
TRUS-CON CHEMICAL PRODUCTS.

You are regularly confronted with special conditions of Waterproofing, Dampproofing and Technical Finishes

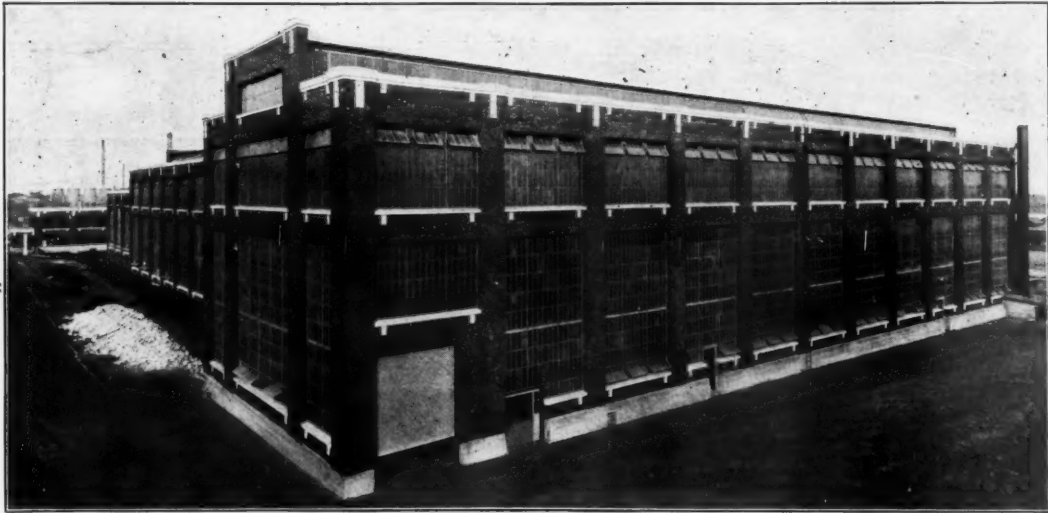
- YOU are designing a reservoir that must be **absolutely waterproof**.
- YOU are making plans for a building that requires a **perfectly dry basement**.
- YOU are preparing specifications for a swimming pool that **must not leak**.
- YOU should provide a treatment to exterior exposed masonry walls to avoid damage and discomfort from **interior dampness**.
- YOU should specify the exact composition of stucco to avoid staining, cracking and disintegration by **absorption of moisture**.
- YOU should be familiar with the most effective method of uniforming and **dampproofing exterior masonry surfaces**.
- YOU should provide fully in specifications for treatment of cement floors to render them **sanitary and dustless**.
- YOU are preparing plans for factory construction the interior of which should be finished with a **washable, sanitary and light-reflecting coating**.
- YOU should provide on important interior work the most **attractive and durable enamel finish**.
- YOU have special conditions of interior exposure such as laboratories, packing houses, hospitals, dairies, etc., that must have **special finishes as required by conditions**.
- YOU have new phases of **waterproofing, dampproofing and special finishing problems** with every new building operation.

FOR MOST DEPENDABLE AND RELIABLE RECOMMENDATIONS ON ANY POSSIBLE PHASE OF THE GENERAL SUBJECT OF WATER-PROOFING, DAMPPROOFING AND SPECIAL TECHNICAL FINISHES, CONSULT US WITHOUT COST OR OBLIGATION.

THE TRUS-CON
1268 Trus-Con Building

LABORATORIES
Detroit, Michigan





Erecting Shop, Busch-Sulzer Bros.—Diesel Engine Co., St. Louis, Mo. The Arnold Co., Engineers. Maximum Daylight and Ventilation for Interior by use of UNITED STEEL SASH for Windows.

Large Lights Make Attractive Windows

The lights in the windows shown in these illustrations are 12 in. x 32 in. in size, about twice as large as in most factories. The large size adds noticeably to the attractiveness of the buildings, giving them a bright, cheerful, clean-cut appearance. The great strength and superior construction of UNITED STEEL SASH makes possible large sized lights.

UNITED STEEL SASH

are built of continuous I-Beam members of extra weight and unweakened by cutting or punching. All sash are machine built under gigantic presses of great power. Ventilators are large and are weatherproofed perfectly by double circular contact joints. The glass bears evenly on its four edges against a continuous steel section. Glazing is simplified by special spring clips and continuous putty ledges.

These distinctive features are found only in UNITED STEEL SASH, which include a complete line of pivoted side wall sash, vertical sliding sash with various counterbalances, center-pivoted and top-hung continuous sash, steel and glass partitions, doors, etc.

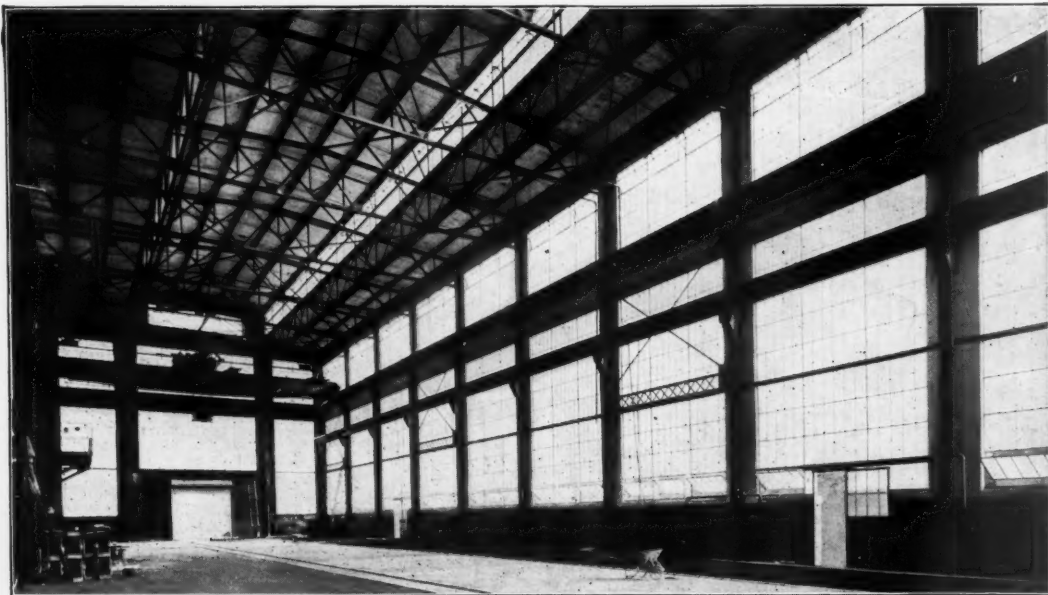
Complete suggestions and UNITED STEEL SASH Hand Book will be sent FREE to those interested in building



Trussed Concrete Steel Company

768 Trussed Concrete Building, DETROIT, MICHIGAN

Reinforced Concrete, Hy-Rib and Lath, Steel Sash, Waterproofings, Finishes, Building Specialties



Interior, Erecting Shop, Busch-Sulzer Bros.—Diesel Engine Co., St. Louis, Mo. One of the most modern plants in the United States and devoted exclusively to the building of Diesel Engines which require the highest class of material and workmanship.

The
Floor Question Answered

**ARROWLOCK
ELASTIC TILE**

Floor tiles of an elastic material
capable of architectural construc-
tion and artistic color treatment.

A utility floor that is as distinctly
structural as Ceramic Tile,
Marble or Mosaic.

An Elastic Cork Compound.

Furnished in all colors.

Can be laid on any smooth back-
ing. Absolutely unaffected by
strains, dampness or heat and cold.

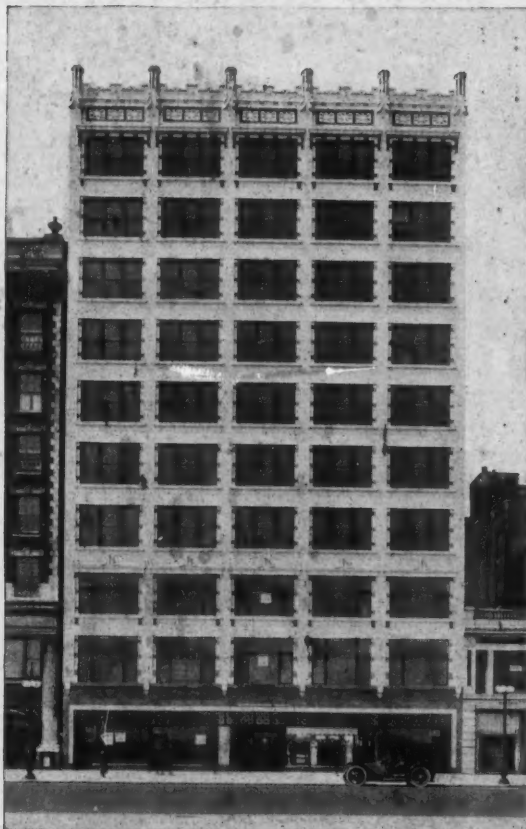
DAVID E. KENNEDY, Inc.

48-56 West 38th St., New York

Write our nearest office for catalog "A" and samples

Boston Philadelphia Cleveland Chicago St. Louis Montreal
San Francisco Atlanta

See Sweet's Catalog Pages 329-331



The BARNHEISEL Bldg., MICHIGAN AVE., CHICAGO
W. CARBYS ZIMMERMAN, Architect

Entire Front in White Enamel and
Polished Granite Finish Terra Cotta Made by

MIDLAND
TERRA COTTA
COMPANY
CHICAGO



JENKINS BROS. VALVES.

The great advantage gained in installing the genuine Jenkins Bros. Valves is reliable service. Not only do the valves look well, but they are well constructed, and when in service they hold tight.

Always specify Jenkins Bros. This little precaution will mean added efficiency to any steam plant, whether used for power or heating purposes.

JENKINS BROS., New York, Boston, Philadelphia, Chicago.

ROBERT W. HUNT JNO. J. CORN JAS. C. HALLSTED D. W. McNAUGHER

ROBERT W. HUNT & CO., Engineers

BUREAU OF

INSPECTION TESTS AND CONSULTATION

Structural Steel, Cement, Reinforcing Steel,
Chemical, and Physical Laboratories

New York Chicago Pittsburgh London St. Louis San Francisco
Montreal Toronto Seattle Mexico City



The **ARMSTRONG**
Electric
Elevator Signal
and Mechanical
Indicators
for Passenger Elevators
**ELEVATOR SUPPLY
and REPAIR CO.**

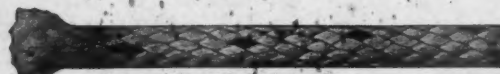
561 W. Monroe St.
Chicago

195 W. 40th St.
New York

Samson Spot Sash Cord



Reg. U. S. Pat. Off.



Reg. U. S. Pat. Off.

Metallic devices or hard fibres are not adapted to the friction and bending incident to running over pulleys. Abrasion between the surfaces quickly cuts them in two.

Properly made braided cotton cord has been proved by both tests and long experience to outwear any other material for this purpose.

Samson Spot Cord is more durable and more economical than common cord, because it is made of extra quality stock, is carefully inspected and is guaranteed free from all imperfections of braid or finish. The colored spots are our trademark. Look for them and beware of imitations. Samples and full information gladly sent.

Samson Cordage Works
Boston, Mass.

THE ARCH OF CONSTANTINE AT ROME

Impost and archivolt of main arch

THIS Arch was erected by the Roman Senate and citizens in honor of Constantine's great victory over Maxentius, the tyrant, which occurred in the year 312 A.D. It consists of a principal central passage and two smaller passages between which and on either side of the smaller ones are eight beautiful free standing columns of the Corinthian Order which are of yellow antique marble and fluted. With the exception of the columns the entire structure is of white marble, a large portion of which was taken from one of the Trajan Arches, laid without cement and the blocks are clamped together with bronze. While the general proportions of this arch are very fine the details are of different values. Aside from the column capitals which are excellent in detail and execution and some of the sculptures there is very little of merit in the architectural ornamentation.

This plate illustrates the cornice of the imposts and archivolt on the south (C) and north (D) sides of the central arch; also the plan of the soffit of the impost. This cornice is finely executed and the design of the ornament suggests a high state of architectural development, while, in contradistinction, the ornaments of the archivolts are decidedly crude in design and of inferior workmanship, indicative of the decline. It is probable that the latter were executed in the time of Constantine.