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CONNECTICUT AVENUE BRIDGE, WASHINGTON, D. C.
EDWARD PEARCE CASEY, ARCHITECT

SOME RECENT AMERICAN MASONRY BRIDGES

By EDWARD PEARCE CASEY



THE tendency in this country to build in more permanent form is manifesting itself in the construction of masonry bridges of all types and sizes and degrees of excellence, from the many-arched structure of considerable length and dignity, to the single arch road bridge, and simple beamed culvert of reinforced concrete. Many are sufficiently refined to be classed as works of architecture, but unfortunately there is a greater number it would be difficult to place under this classification.

Some of the older railroads have been the leaders in this movement, and have

constructed masonry bridges of cut stone or concrete, and sometimes of brick.

Great encouragement to the movement toward masonry construction has been given by the combined excellent quality and cheapness of the cements now produced in such enormous quantities in this part of the world.

As a rule, the larger and more important bridges of recent erection appear to have better lines and altogether are more pleasing architecturally than a great many of the smaller highway bridges, which frequently appear to be deficient in one of three vital particulars, and even sometimes to err in all three of them. These points are the curve of the arch, the number of arches, and the treatment of the abutments.



"BALA" BRIDGE ON SCHUYLKILL DIVISION, PENNSYLVANIA RAILROAD

These are three fundamental elements of the composition, and they have nothing to do with the detail, or with the further elaboration of the design, but they are the most important elements of the architecture of the bridge.

There is a marked tendency to use compound curves, or those made up generally of segments of circles of various radii. These curves generally closely approach an ellipse, but do not quite attain the perfection of that curve, and the appearance of the arch is consequently not pleasing. The prevalence of these compound curved arches is rather remarkable, as it is no more difficult to lay out an ellipse, by any of the simple methods given in the books, than to compound one of these awkward curves.

The use of the parabola is less frequent, although more justifiable, as this curve frequently approaches rather closely the calculated line of pressures, but it has the appearance of a distorted circular curve, and for this reason it is not agreeable to the eye. Its employment does not occasion any great economy in construction.

It would appear then, that we are limited to the use of the slightly stilted semi-



CONCRETE BRIDGE ON B. & O. R. R., CUMBERLAND, MD.

circular curve, the single segment circular curve, or the ellipse, and these are really the only curves of which the eye does not tire.

As to the number of arches, it is surprising how many bridges of two or four arches are built, where apparently this arrangement might be avoided without increased expense in construction. This use, of an even number of arches, brings a pier at the center of the length of the bridge, but as is well known in architectural practice, a support at the center of a composition is from an æsthetic, and often practical point of view, something to be studiously avoided. The greater the number of arches, the less the pier at the center offends the

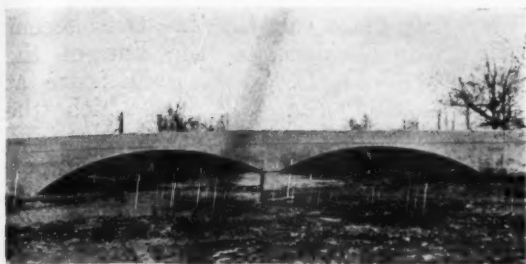


BRIDGE AT ELLSWORTH, PA., SHOWING AWKWARD APPEARANCE OF PARABOLIC ARCH

canons of composition, as it becomes less apparent at a glance, and when the number of arches exceeds nine, its detection is difficult without counting the arches. It therefore becomes unimportant whether the number of arches are odd or even.

As to the abutments, there have been a number of small bridges constructed recently, in which visible abutments are entirely lacking, the arch terminating in the ground, and giving the composition an indeterminate or lost look, not pleasing in a structure that is built to last, and which should be made to look as if it would last, by having something visible for the terminating arches to thrust against.

In many of the larger bridges it is frequently impossible or impracticable to construct the two abutment portions or terminations of the bridge absolutely sym-



BRIDGE SHOWING AWKWARD APPEARANCE OF PIER AT CENTRE AND OMISSION OF ABUTMENT PIERS

metrical, both on account of the unsymmetrical contour of the land, and the necessary accommodation of roads and other natural and artificial features, but much more may be accomplished toward this end than is frequently the case, by making unimportant changes in these obstructing features. The appearance of a number of monumental bridges has been almost ruined by neglecting this symmetry in composition, which in some instances might have been attained at no great cost.

These three important elements of design, that is the curve of the arches, the number of arches, and the symmetry of the abutments, having been determined properly, the design will already be good in an architectural sense; but there are many other features which must often be determined, such as the treatment of the rings or outer faces of the arches, the treatment of the spandrels, imposts, piers, cornices, rails, etc.; but any treatment of these features may often with propriety be omitted, and the bridge left absolutely plain.

The cambre or arching of the roadway between the extremities of the bridge, is often desirable, and is a matter to be carefully determined. The appearance of bridges of moderate length, lying close to



WALNUT LANE BRIDGE, PHILADELPHIA

the surface of the water, is often improved by this arching of the roadway, and moreover it very often facilitates the drainage of rainwater from the deck of the bridge.

The splaying, or chamfering, of the arches of bridges over streams subject to floods carrying ice and other floating objects, is of great advantage, as the passage of such objects is facilitated and jams prevented. This gives rise to a different curve for the ring stones on the faces, from the curve of the soffit, as shown in the design for a bridge across the Housatonic River, (page 122) wherein the rings have a segmental curve, and the soffit is an ellipse. The splay is a warped surface, at approximately forty-five degrees to the face.

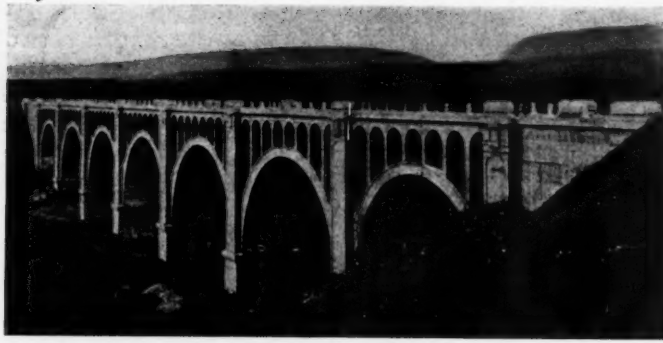


ROCKY RIVER BRIDGE, CLEVELAND, O.

Nothing is handsomer or more enduring than a well designed masonry bridge, executed in cut stone, such as granite, but it is often needlessly extravagant and wasteful, particularly in the use of cut stone in the construction of the entire soffit or under surface of the arch.

A good substitute for these cut stone soffits is monolithic concrete, or even brick, and this is especially so in the case of a skew arch, where the soffit stones or voussoirs are very complicated, and the stone cutting involved, correspondingly expensive.

This expensive cutting of skew arches has frequently been overcome in this country by the rather primitive alternative of offsetting one ring over the other for the full width of the bridge, but the effect is ragged and bungling when a view of the soffit is obtained, and it certainly does not look advanced enough to be the work of modern architects and engineers.



PAULIN KILL VIADUCT, D. L. & W. R. R.

When it is a question between having no masonry bridge, or having one coming within the means of those who are to pay the bills, resort is had in these days of good and reasonably priced cements, to concrete, used in one form or another, and often with metal re-inforcement.

The weathering quality of a first-class concrete appears to be equal to that of a good limestone, and its use need not be avoided from any fear of its lasting qualities.

If the exposed surfaces are bush hammered or rubbed, after the concrete has thoroughly hardened, the effect compares favorably in general attractiveness with a well finished stone surface. This method of finishing concrete surfaces seems to give results far superior to those obtained by treating the surfaces while they are still soft, or in a partially set condition.

In the majority of cases, the concrete is poured in wooden forms, and results in practically a monolithic structure, very often with steel re-inforcement introduced to counteract tensile stresses. In this method of building, it is not reasonable to introduce stone jointing, or to imitate block masonry in any form, and in fact this form of architectural prevarication is not often resorted to.

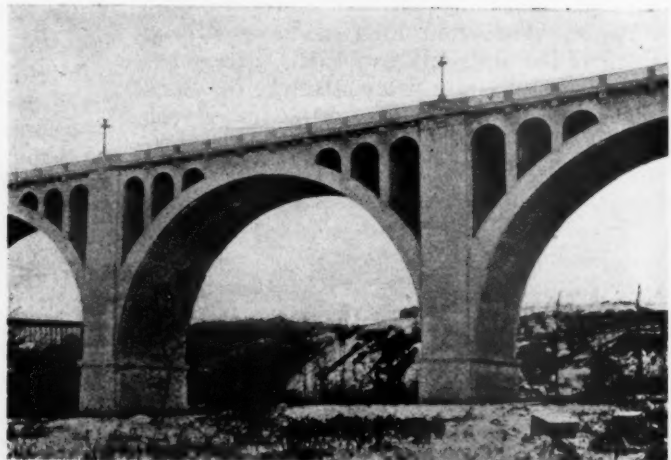
Good examples of this monolithic form of construction, in which the design is well proportioned and composed,

are shown in two recent bridges on the line of the D. L. & W. R. R.; one at Paulin Kill, in which the arches are semi-circular, and fortunately seven in number; the other across the Delaware River at Portland, Pa., (see page 121) which likewise has seven arches, which appear to be true ellipses.

The bridge of the B. & O. R. R. at Cumberland, Md., (see page 118) is of very simple design, shows true elliptical arches, and is well proportioned.

There have also been built recently, several bridges or viaducts spanning deep valleys, with one large segmental arch, generally built in two ribs, examples of which are shown in the Rocky River Bridge at Cleveland, the Walnut Lane Bridge at Philadelphia, (see page 119) and one at Pittsburgh. These bridges are well conceived in their fundamental designs and are impressive structures, having spans generally of upwards of 300 feet, but several are lacking in the appearance of solidity in some of their minor parts, and are lacking in refinement of detail. They also frequently show imitation stone joints in monolithic work.

A more attractive form of monolithic concrete structure, is where stone is employed in conjunction with the concrete to



DETAIL OF CONNECTICUT AVE. BRIDGE, WASHINGTON, D. C.
EDWARD PEARCE CASEY, ARCHITECT

form the imposts, cornices, parapets, rings, quoins, etc., or even to form the whole of the lateral faces of the bridge. This method of construction originated in the desire to use harder and more resisting material for the angles and mouldings and parts subjected to wear or pressure. It results in a handsomer and more costly structure, but leads also to a considerable amount of saving in form work, and sometimes assists during construction in the supporting of the forms.

Two handsomely designed bridges in Minneapolis show this complete stone facing but the effect of the compound curve of the arch, in one of them, detracts from the beauty of its lines.

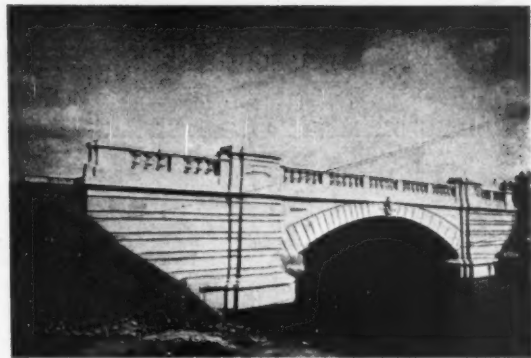


BRIDGE ON LAKE OF THE ISLE BOULEVARD, MINNEAPOLIS, MINN.

The monolithic concrete bridge over the Pennsylvania R.R., (page 118) on the contrary, shows how graceful the ellipse is in comparison to those near approaches to this curve.

Concrete may have a legitimate use when cast into blocks and put in place in separate pieces, as when it is poured in place in large masses. When used in this way the advantage to the structure in eliminating defective castings is apparent.

The defects in monolithic work are incorporated in the structure, and can never be satisfactorily overcome. The joints in concrete block work, naturally cannot be concealed, and in this respect therefore this form of concrete masonry possesses the same attractive qualities as stone masonry, and may satisfactorily replace it, especially when the blocks are cut or finished in the same manner as stone and are also cast from a very rich mixture, insuring great hardness.



BRIDGE ON DEAN BOULEVARD, MINNEAPOLIS, MINN.

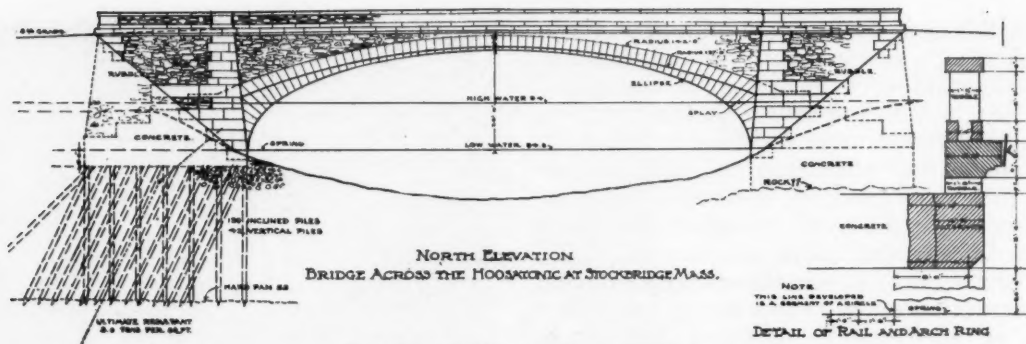
The Connecticut Avenue Bridge in Washington, D. C., is probably the most conspicuous, if not the only example, of a combination of both block and monolithic concrete used in bridge construction. It is of considerable scale, having five arches of 150-foot span, besides two abutment arches of eighty-foot span. Here the main mass of the structure is monolithic and without re-inforcement. The mass concrete is of a decided buff tone, due to the color of the sand used in its composition, and where it is exposed on the plain surfaces of the piers, spandrels, abutments, and arch soffits, forms a very pleasing contrast to the gray color of the masonry, caused by the use of powdered gneiss instead of sand.

This concrete block work has since been adopted in several dams, notably the Ashokan Dam for the New York Aqueduct, and is relied upon to form the weather surface of these important structures.



DELAWARE RIVER BRIDGE

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We have heretofore discussed only masonry bridges of unbroken line; we now come to masonry bridges over navigable streams, where it is necessary to divide them into two sections, and have a draw opening for the passage of vessels.

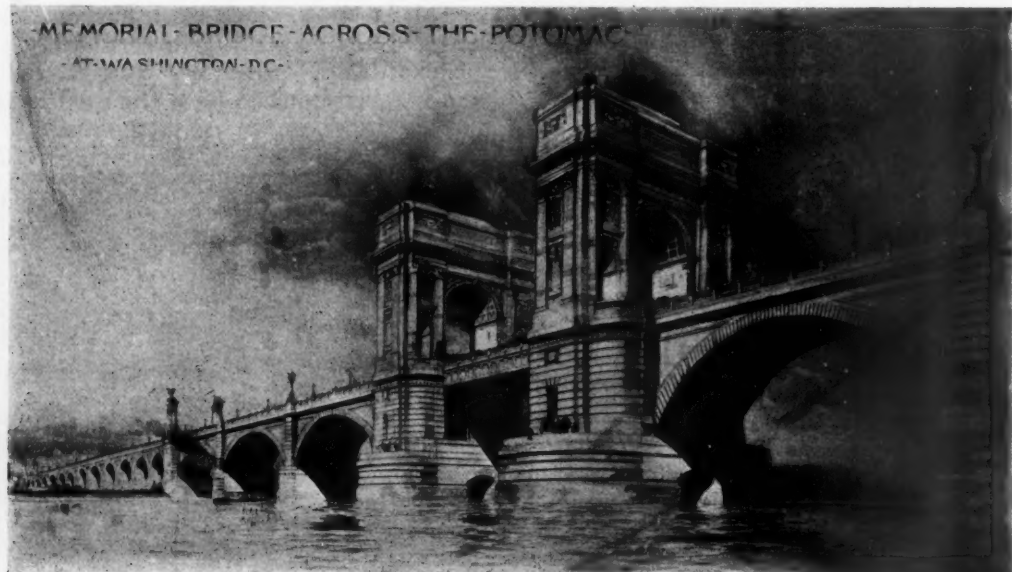
A satisfactory design, under this condition, is more difficult.

The most suitable draw for this type of bridge is the bascule with single or double leaves, resembling on a large scale the old lift bridges at the sallyports of ancient castles or fortifications.

The draw is often marked, very properly, by some prominent feature, such as transverse arches over the roadway, or lateral monuments of some form, to give an accent at this awkward break in the composition

of the bridge, and make of it a feature to be taken advantage of in the design, or in other words, a virtue out of necessity. These superimposed features at either side of the draw, if not always structurally necessary in reality, by their weight afford an actual increased stability against the arch thrusts at this break, and at the same time give an appearance of greater permanency, which is always an attractive quality in any structure.

A design for a Memorial Bridge across the Potomac River at Washington, the result of a competition held some years ago, shows the solution of a problem of this character on a large scale, and indicates the use of sculpture in the embellishment of a bridge.



EDWARD PEARCE CASEY, ARCHITECT

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WATCHING LEGISLATION

THE architects of a western city are said to be considerably disturbed by reason of passage of a new state law, intended to regulate the erection of hotels and apartment houses, which requires yards of stated width and fixed position regardless of the shape and size of the lot. Local architects who have made a study of its provisions are said to be unanimous in their criticism of the act and declare that it amounts, under certain conditions, to confiscation of small and shallow lots. The bill prepared by a senator ran the usual gauntlet of committees of the Legislature and received the approval of the governor without ever having been submitted to a committee of architects or engineers, men qualified by experience to judge such matters. Unfortunately this method of procedure among legislative bodies is so frequent that the feelings of professional men seem to have become calloused and indifferent to the practice, but not its result.

When, for example, a bill is under consideration which may prevent—or cause—a financial panic it is not always the judgment of the banker that prevails, or is even sought, but too frequently that of the grocery store politician. Mat-

ters pertaining to architecture and building are as frequently left to a legislator who cannot be expected to exercise the same judgment or act with the same discretion as would a man with technical training and experience.

Although the opinion of architects and engineers was not obtained before the passage of the objectionable legislation referred to, the author states that inasmuch as there was no opposition nor even comment on the bill when it was before the Legislature it was deemed satisfactory to all parties concerned, such as property owners and architects. From this we can only assume that there was opportunity for comment or opposition on the part of the public. Fortunately star chamber methods of enacting state laws are becoming infrequent. Even the shrewdness of statecraft and American methods of "swift justice" are generally powerless to put a law on the statute books before there has been opportunity for public discussion and protest. In this instance the legislators seem to have been trying in good faith to enact a measure in the interests of the public welfare. Failure was evidently due entirely to lack of proper procedure on the part of legislators, and indifference or inaction by that part of the public most vitally interested. If the law is inapplicable to practice in some cases and extremely defective in others the fact is due not to malintention but to lack of knowledge. Doubtless its author would have welcomed suggestions, from men competent to advise, as to the best methods of gaining the beneficial effects desired. That he did not ask such advice is the misfortune of the state; that architects and other interested citizens did not proffer the advice, though unasked, is extremely unfortunate from every standpoint.

If without having their motives impugned, and their efforts regarded as lobbying, duly appointed committees of interested architects were charged with watching state and local legislation, protesting against the passage of unwise measures and encouraging such as would be beneficial, our lawmakers would be materially aided in their well-intentioned but often misguided efforts. Commercial bodies are not backward about pressing their interests

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with the legislators and professional organizations should not be less aggressive in honorable efforts in behalf of their own and the public welfare. Possibly the irritation of the architects in the western city is caused not so much by the action of well-intended legislators as by their own failure to keep informed on matters of interest to both themselves and their clients.

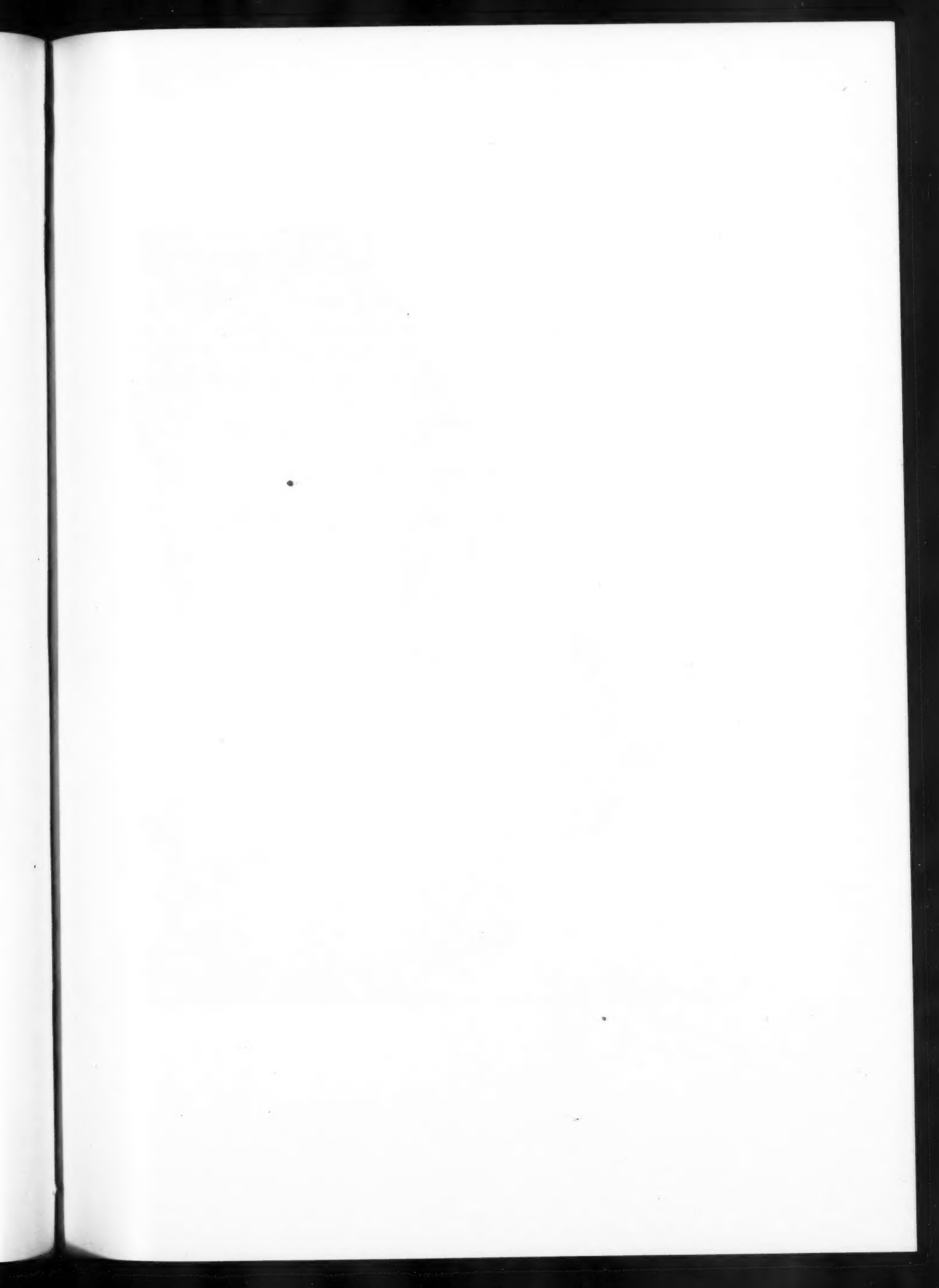
COMMERCIAL ARROGANCE

THE curious anomaly of an employee dictating all the terms and conditions of his employment is presented in a report to the effect that certain building and commercial interests are preparing standard specifications, contracts and other documents, with a view to promulgating them and insisting upon their exclusive use whether they are approved by the American Institute of Architects or not. The avowed purpose is "that the business side of the construction work shall be conducted by men who are experienced and skilled in that line,"—the actual purpose, it would appear, is to place its control largely in the hands of those building and commercial interests which have prepared the documents, and are more or less dependent for business upon the patronage of the consumer through his adviser, the architect.

The grievances of which these interests especially complain are alleged ambiguous clauses in recently adopted standard documents and what are considered to be broad discretionary powers on the part of the architect in interpreting those ambiguous clauses. Certainly many architects realize the advantages of a contract in which commercial interests may feel free to enter with an assurance of justice to all concerned.

Probably architects of the highest standing have never been entirely satisfied with the form of contracts heretofore generally used, but for various reasons have adopted them for the want of something that would be more satisfactory to the contractor and at the same time assure justice to their clients. The new forms represent an honest attempt to remedy defects that had long been recognized in the old.

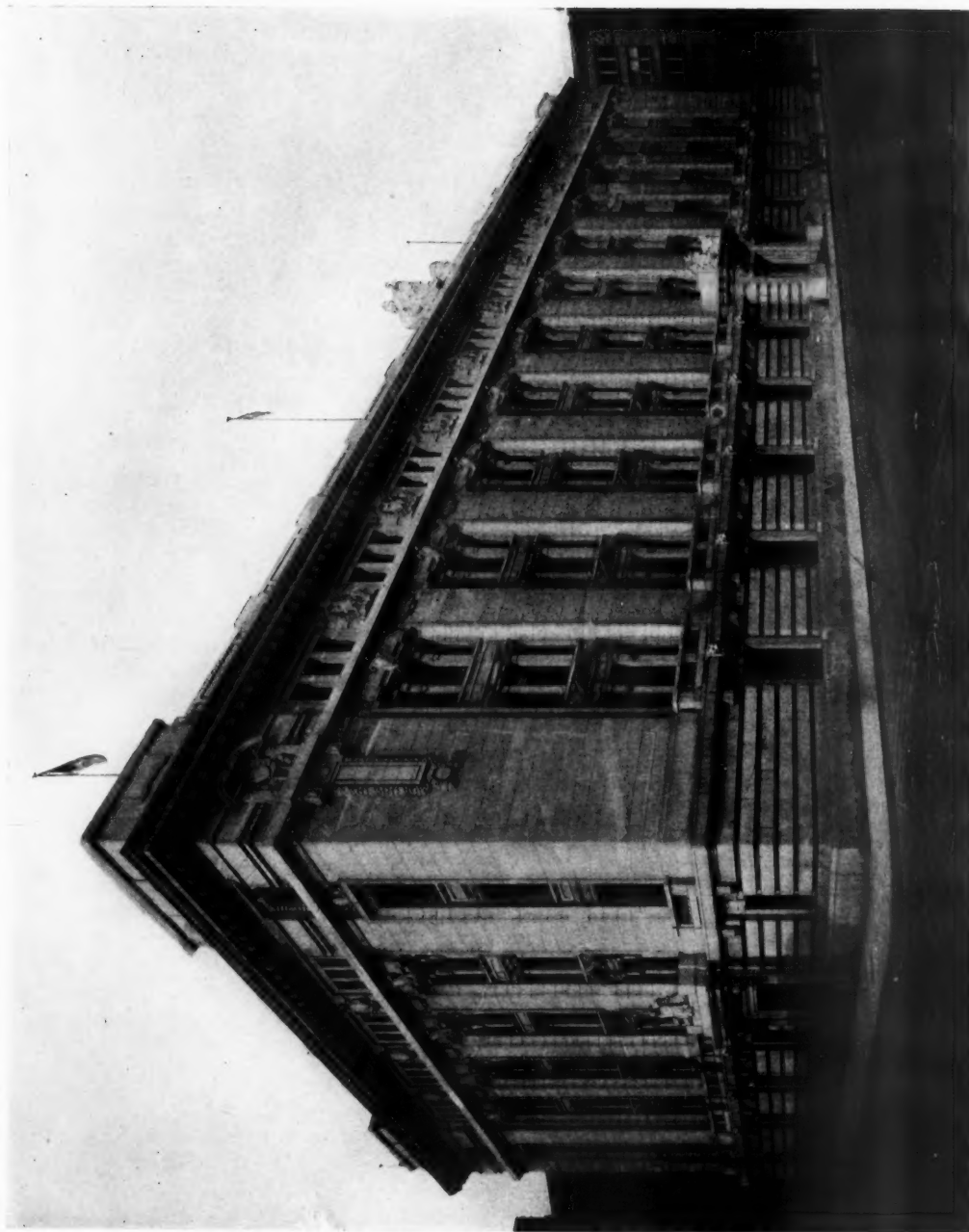
All phases of architectural practice are, so to speak, in a fluid state; they have always been shifting and changing and the general tendency has been toward progressive improvement. As a class architects are conservative from the very nature of their calling, but they are also necessarily responsive to the call of Progress. During the past two decades they have shown themselves to be not only open-minded, but eager in the consideration of anything from any source that promised greater efficiency in the practice of their profession. It is quite possible that a committee of architects would willingly confer with a representative committee of commercial interests engaged in building operations, with a view of further perfecting contract forms if the need for doing so actually exists. However, the stated intention of certain business interests to arbitrarily codify the conditions upon which prospective clients might employ them and to attempt to enforce these conditions throughout the country with or without the approval of architects would seem to savor strongly of what are now generally designated as "trust methods." It is probably safe to predict that they will meet with active opposition, and in view of all the circumstances their chances of success appear extremely remote.



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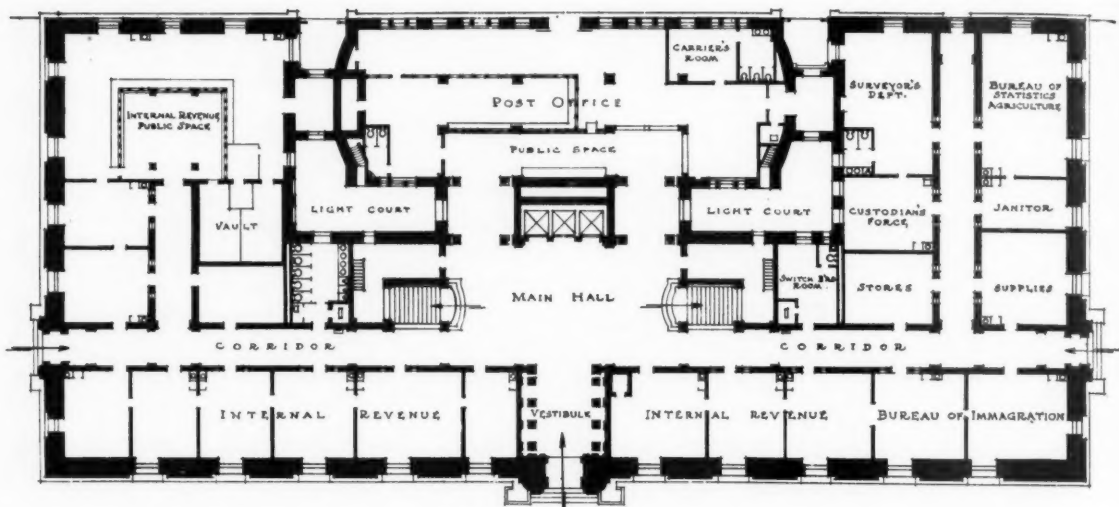
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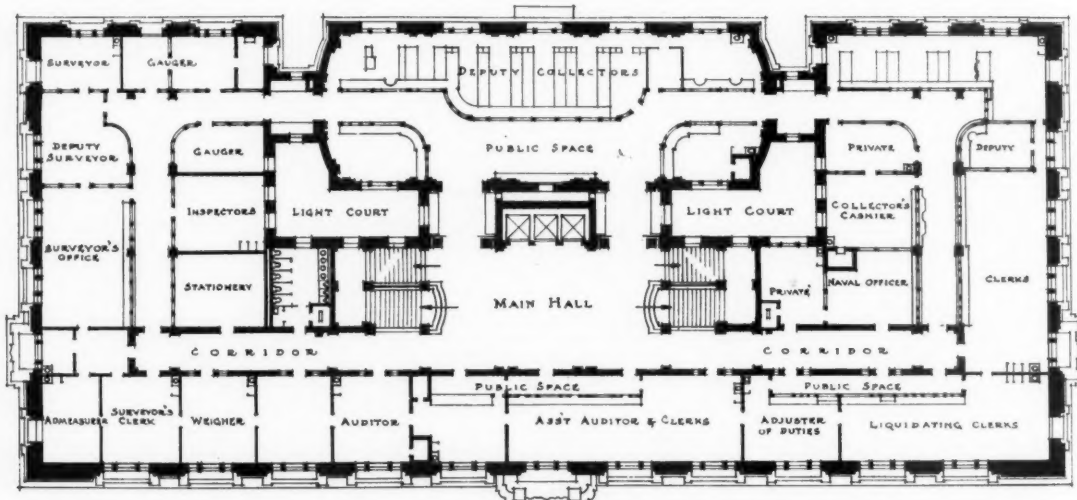
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U. S. CUSTOM HOUSE, SAN FRANCISCO, CAL.

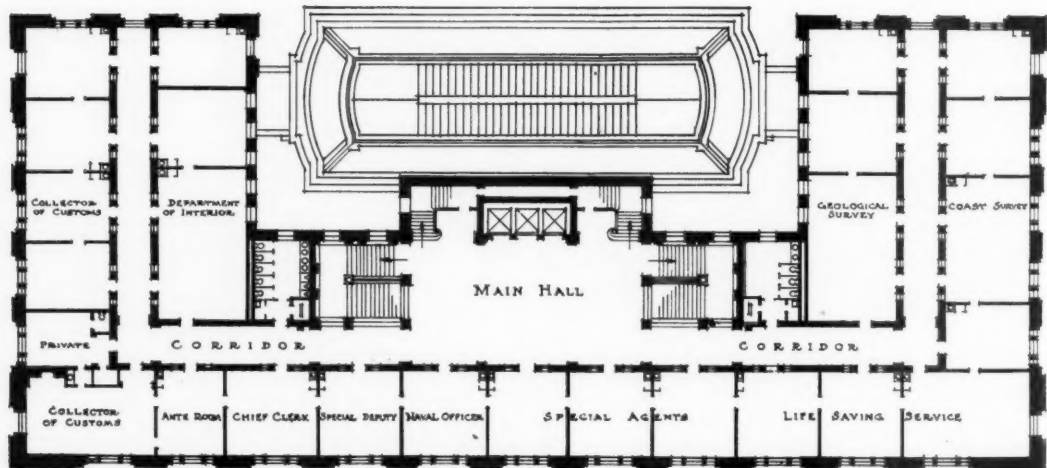
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GROUND FLOOR PLAN



MAIN FLOOR PLAN



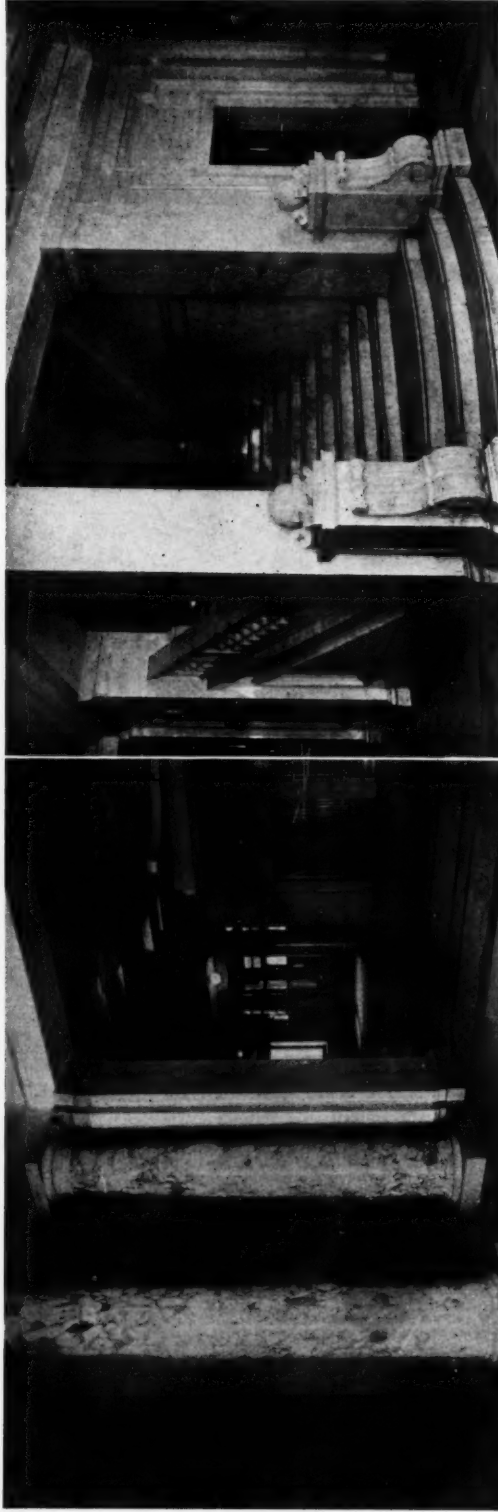
THIRD FLOOR PLAN

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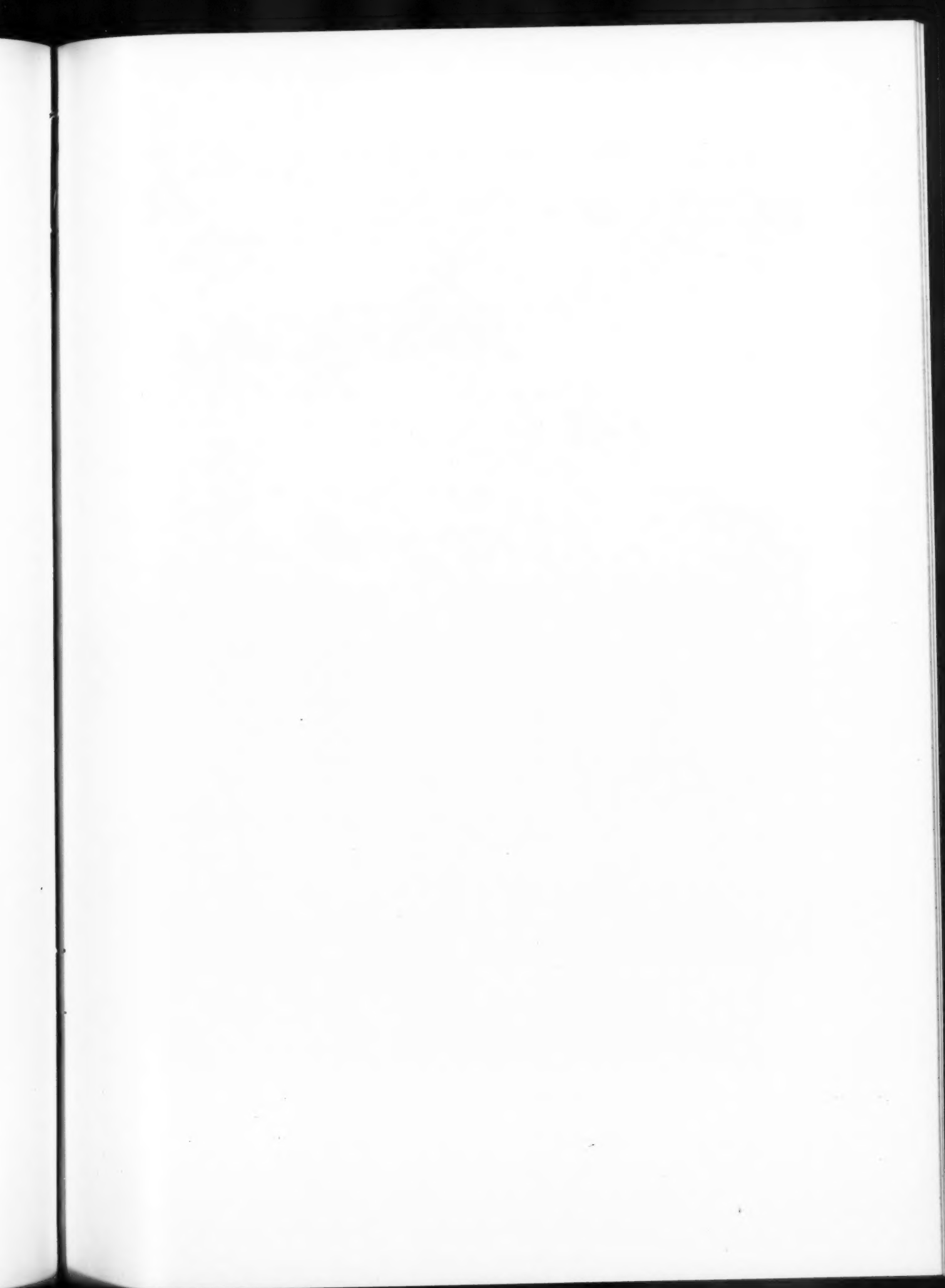
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INTERIOR VIEWS

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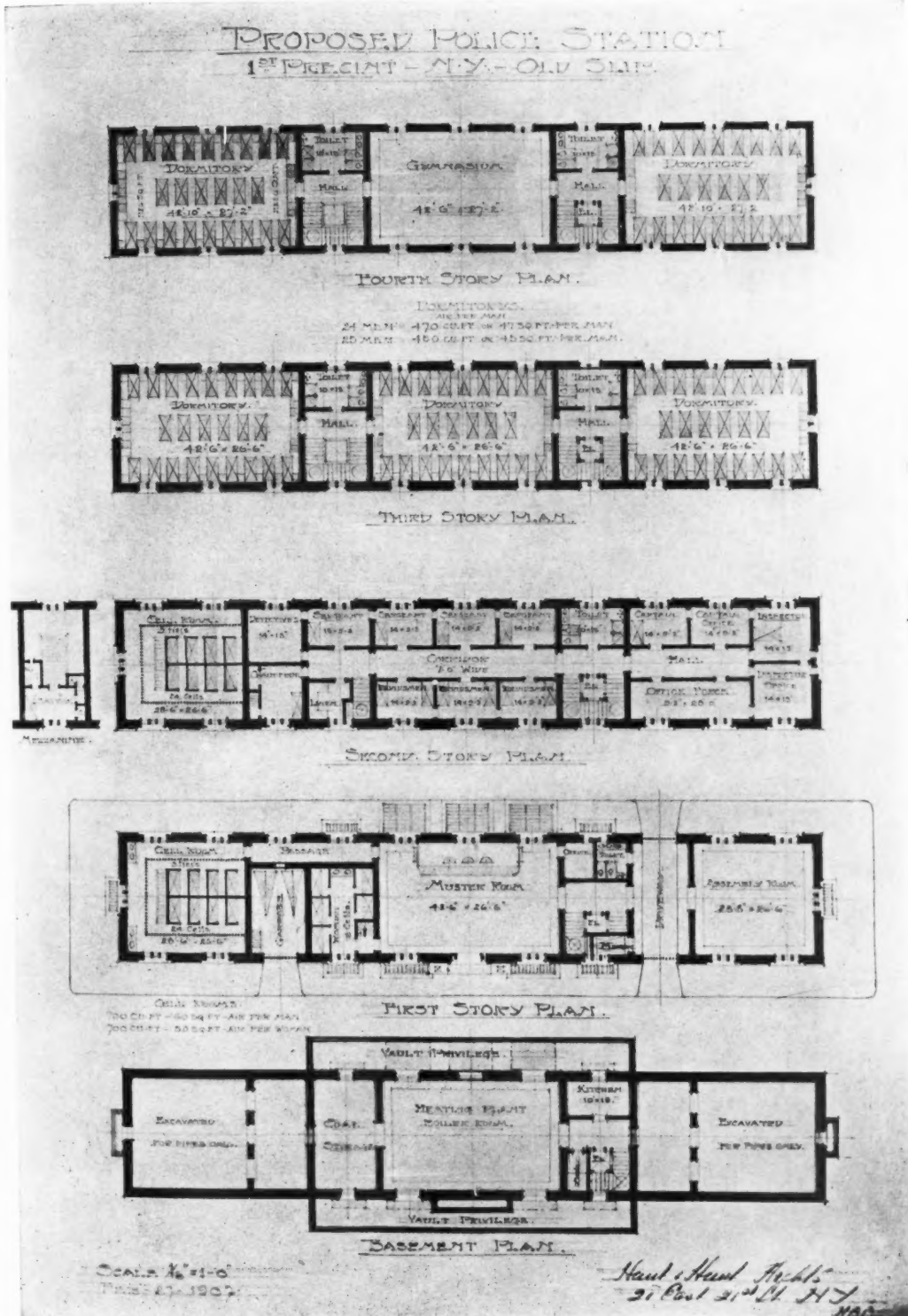






OLD SLIP, FIRST PRECINCT POLICE STATION, NEW YORK

MESSRS. HUNT & HUNT, ARCHITECTS

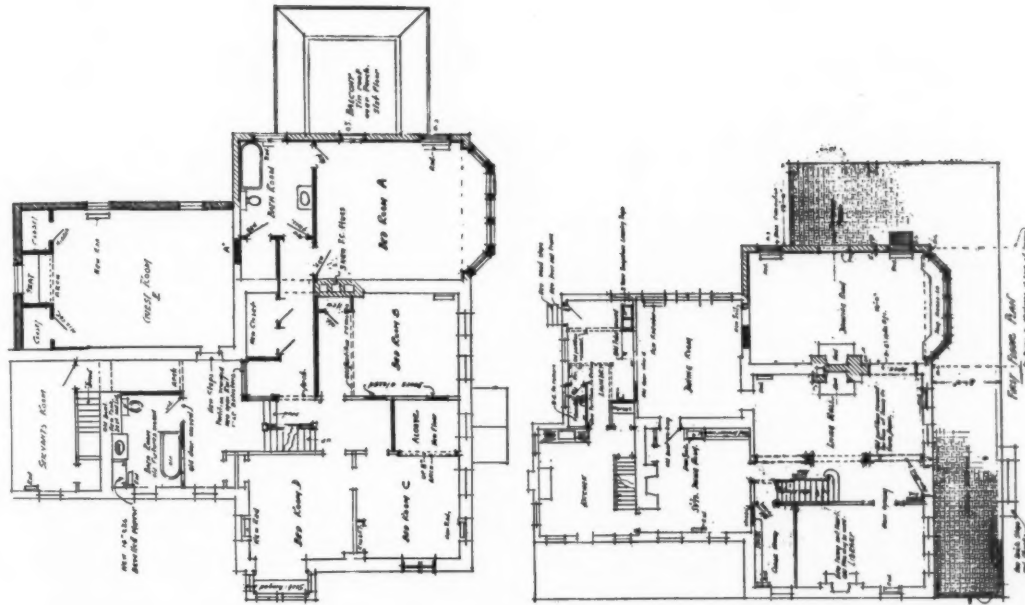
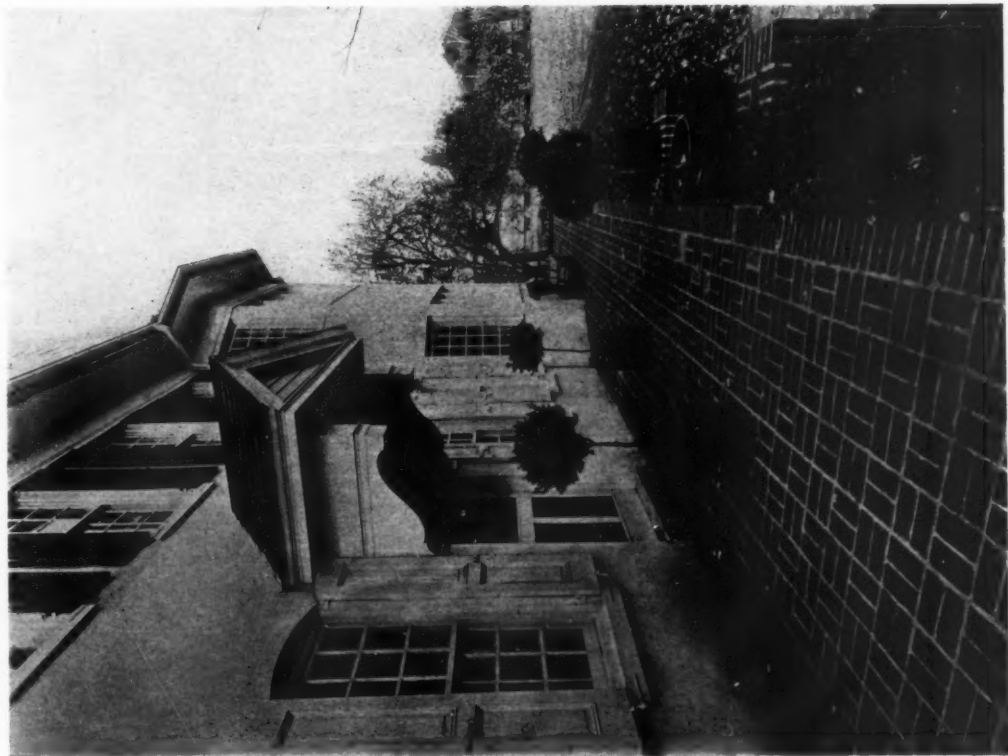


OLD SLIP, FIRST PRECINCT POLICE STATION, NEW YORK
MESSRS. HUNT & HUNT, ARCHITECTS



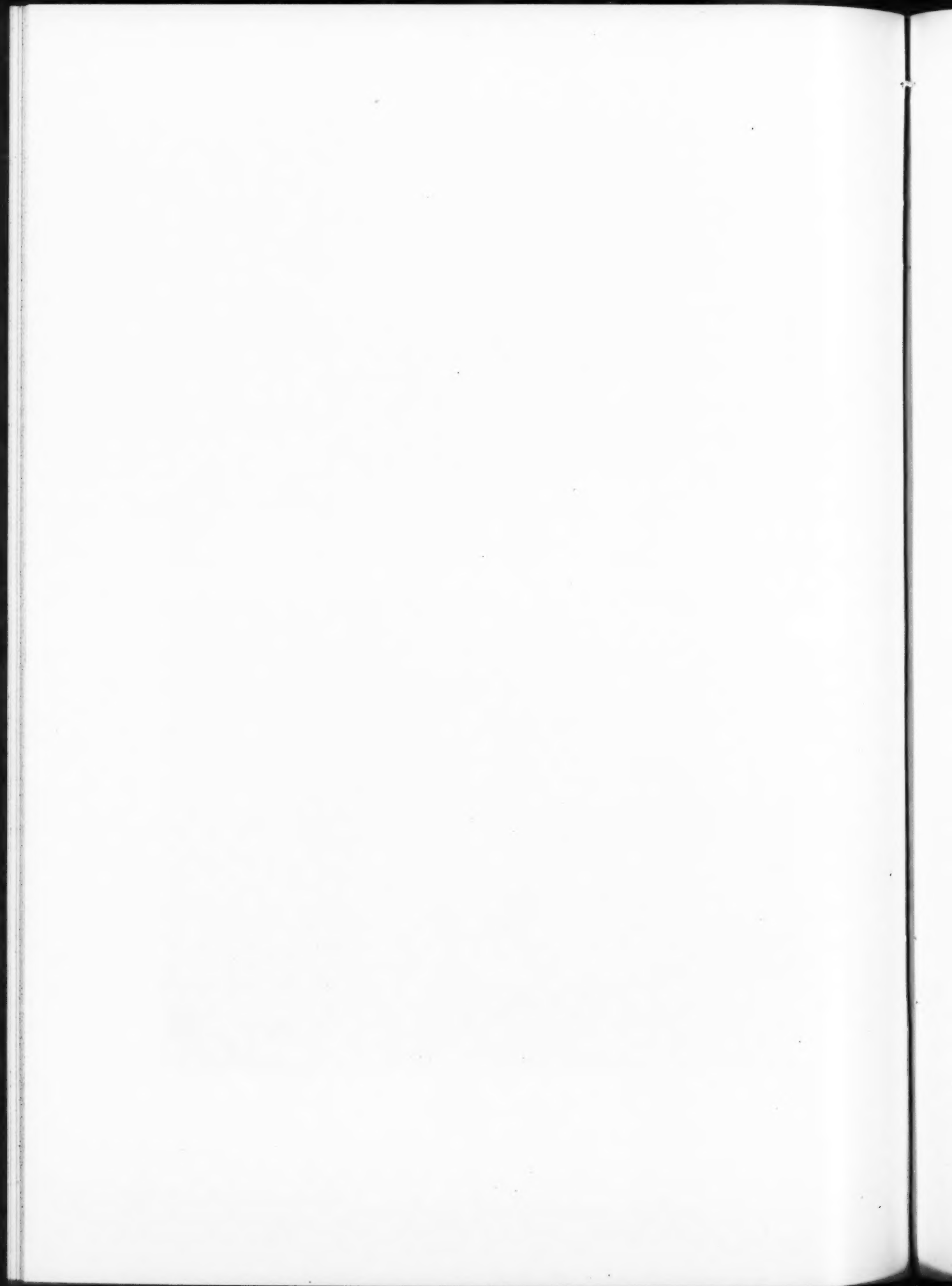
ALTERATIONS TO HOUSE OF A. VON BERNUTH, ESQ., STRAFFORD, PA.
MR. GEORGE S. IDELL, ARCHITECT

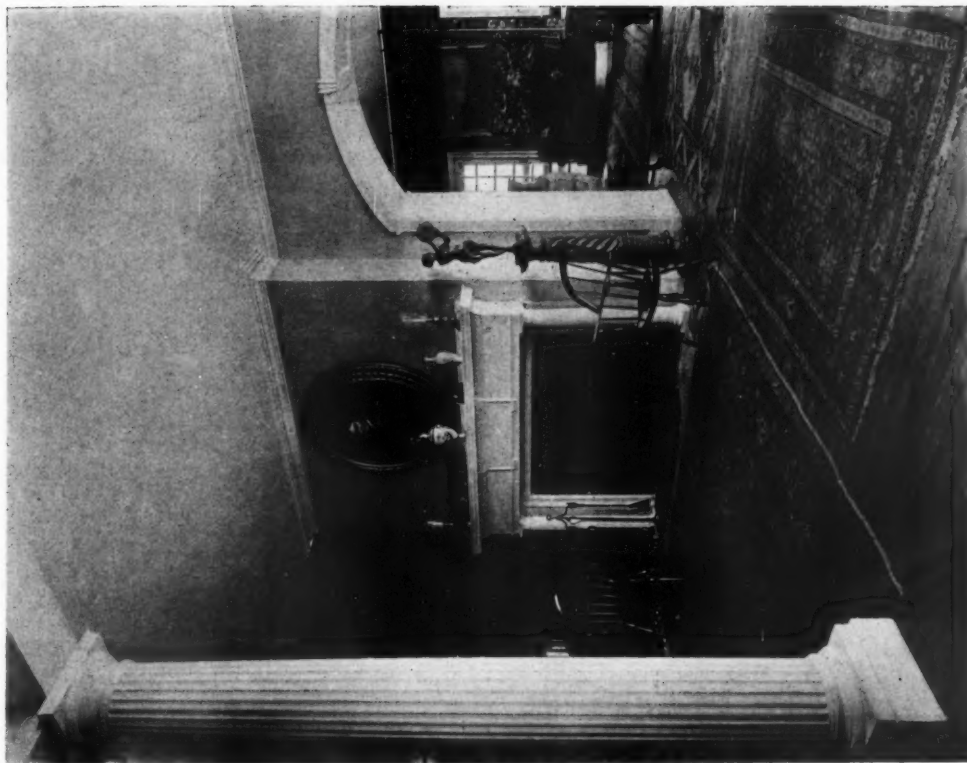
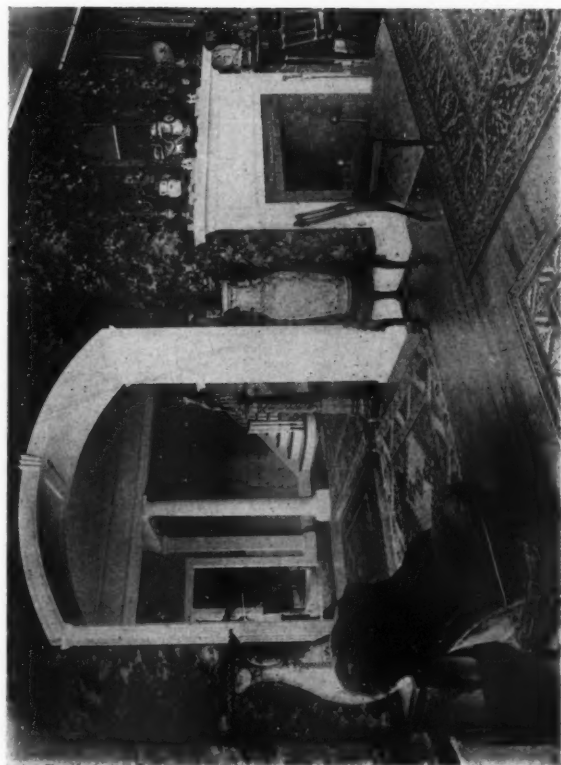




ALTERATIONS TO HOUSE OF A. VON BERNUTH, ESQ., STRAFFORD, PA.

MR. GEORGE S. IDELL, ARCHITECT





ALTERATIONS TO THE HOUSE OF A. VON BERNUTH, ESQ.,
STRAFFORD, PA.

MR. GEORGE S. IDELL, ARCHITECT

CURRENT NEWS AND COMMENT

ART IN THE TARIFF BILL

In spite of the protest of artists everywhere in this country, the Senate has incorporated in the tariff bill recently passed an increase from 15 per cent., as in the former measure, to 25 per cent. in the present bill, on modern paintings and statuary. Books printed in foreign languages and art antiquities, including all paintings and sculpture, are restored to the free list.

It is difficult to understand why there should exist in the Senate strong resistance to the free importation of art antiquities, and it is gratifying to note that there are men in this body who are broad-minded enough to combat an opinion so inimical to artistic progress. Washington dispatches state that it is due to the efforts of the senior Senators from New York and Massachusetts, Elihu Root and Henry Cabot Lodge, that the Senate was induced to consider even this matter of free art antiquities in the present bill.

In a debate preceding the passage of the bill, Senator Thomas of Colorado delivered himself of the following sentiment:

"Our very wealthy people import at great cost works of art for their own private galleries; the pictures are immured from all public inspection and restricted to themselves and to their immediate friends and admirers as something acquired to satisfy a taste or a fad, and to which the public are denied all access."

Everyone that knows art conditions in this country is aware that the Senator misstated the facts. We are led to wonder if such superficial statements as these can influence members of what we are assured is "the most dignified deliberative body in America."

Every art museum of importance in this country is a practical refutation of the arguments of the gentleman from Colorado. The most prominent instance is the Metropolitan Museum of Art in New York. The liberality of the late J. Pierpont Morgan, and his entire unselfishness as a collector, is shown in every room in this museum, as is also that of Mr. James A. Hearn, whose donations of pictures is valued at upward of a million dollars. Scattered throughout the museum are countless bequests and donations. The same conditions exist in the Brooklyn Museum, that at Baltimore, at Chicago, Detroit, Toledo, Buffalo—in fact every large city in this country has benefited by the generosity of the very men whose motives the Senator seeks to impugn as sordid and smacking of snobbishness.

It is too bad that the generous spirit that is so apparent all over the country should be so little understood by a member of our highest legislative

body, whose claim to a seat in the Senate would, we should suppose, be based on a broader and deeper knowledge of important matters than his quoted utterance would seem to indicate.

WASHINGTON STATE SUPREME COURT HANDS DOWN IMPORTANT DECISION

In a lengthy decision just handed down, the Supreme Court of the State of Washington has affirmed the King County Superior Court in the suit of A. W. Gould and others against R. C. McCormick and wife, appellants. The lower tribunal awarded the architects' damages in the sum of \$7,239, and \$1,500 for attorney fees, as the result of the appellants discharging them before the new nine-story hotel they were building in Seattle was completed.

The court rules that under the terms of the contract the owners had no right to discharge the architects in an arbitrary manner, and agrees with the lower court that no reasonable grounds for their discharge were shown.

FINDS ANCIENT HARBOR OF POMPEII

Newspaper dispatches from Naples state that the exact site of the harbor of Pompeii, for which search has been made for centuries, has been discovered by the sculptor Lorenzo Cozza, who has for years continued the investigations begun by his late father.

The harbor, it is claimed, is 1,250 yards inland from the beach, as it at present exists, and 700 yards from the Gate of Pompeii.

THE BILLBOARD ON THE PACIFIC COAST

The subject of billboard advertising on the Pacific Coast, and particularly in San Francisco, has now become one of present interest, and the matter has been receiving considerable attention from the San Francisco Supervisors.

The question that is being discussed, not only in the deliberations of the Supervisors but in the daily press as well, is whether or not the billboard in its present form is not a public nuisance.

Naturally those engaged in this form of advertising are strenuously active in combating sentiment that is developing a strong sense of dissatisfaction over present methods. The advertising companies set up the plea that they give employment to labor. This contention does not, however, seem logical. All sorts of disreputable resorts which claim the activity of the authorities in their suppression might set up the same plea, but no self-respecting member of

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the community would entertain an argument so specious and so entirely illogical. Probably no person can take exception to the billboard method of advertising publicity when properly controlled, but as matters are at present the industry, if one may call it so, is marked by such disregard of the artistic proprieties as well as public comfort and convenience, that it is time it was forced to confine itself to more reasonable limits. There is no lack of laws regulating the erection of billboards, but their enforcement is a dead letter, and for reasons that should be detected, flagrant violations of city ordinances are apparently ignored. The time for radical action that will serve as a guide for all of the cities is ripe, and it will be interesting to note the result of the present agitation of this subject in cities along the Pacific Coast.

ARCHITECTS' FEES

The recent decision of a British Columbia magistrate, in effect that an architect cannot claim a mechanic's lien in connection with the preparation of plans for building purposes, comes as a complete surprise to architects throughout British Columbia.

Vancouver architects, especially, are considerably chagrined at the outcome. The case on which the issue was decided involved a building which had already been erected. This leaves the situation all the more embarrassing.

Heretofore it has been generally taken for granted that an architect could claim fees under the mechanic's lien act, in common with others identified with the building trades. The magistrate held that quoted decisions tending to support this belief had not involved the claims of an architect for fees, directly based on the action of a lien.

The architectural profession has always felt that the preparation of plans actually used in subsequent construction work has been of equal importance to the furnishing of materials or labor, and that the same measure of legal protection in enforcing payment of fees should be extended.—*Constructor* (Toronto).

A PROPOSED AMERICAN INSTITUTE OF QUANTITY SURVEYORS

It is stated to the local San Francisco press that a movement has been started among architects and building contractors to form a local council of a National Institute of Quantity Surveyors, now in course of organization throughout the United States.

Officers of the council were elected as follows: William Mooser, President; G. Alexander Wright, Vice-President; Malcom H. Ferguson, Secretary and Treasurer.

It is stated that the purpose of the association is the encouragement of better methods of estimating

and to provide a forum where those engaged in building operations may meet on common ground and discuss contract work and all other questions affecting the construction of buildings.

While the introduction of the quantity surveyor is a new element in building operations in this country, he has long been an acknowledged important factor in Europe.

COMPETITION IN GERMANY FOR EMBASSY BUILDINGS AT WASHINGTON, D. C.

Cable dispatches state that the competition held in Berlin, and restricted to German architects, for an embassy building to be erected in Washington, D. C., has been won by Professor Bruno Moehring, a prominent German architect.

Further details of this competition will be awaited with interest, as it marks the first attempt on the part of a foreign power to erect an embassy building at the National Capital that will be distinctly typical of the nation it is intended to serve.

A PREHISTORIC TEMPLE FOUND IN SARDINIA

Excavations now in progress in Southern Sardinia are disclosing discoveries of great archaeological importance. Beneath the ancient church of St. Anastasia there has been discovered the remains of a large subterranean temple dating back to at least 1000 B. C. Many sacred images were found intact and the mural decorations are reported as well preserved.

Referring to these excavations and the results achieved, a London correspondent to the *New York Times* states:

"The excavators are now busy clearing the beautiful side chapels, which are richly adorned with ceramic work.

"The sepulchres disclose remarkable statuettes of ancient warriors which archaeologists declare to be proof of the correctness of the contention of the illustrious Schiaparelli and other Egyptologists that the Sardinian fighters alluded to under the name 'Sardinia' in monuments of the nineteenth dynasty really participated in arduous enterprises and piratical campaigns on the coasts of Lower Egypt.

"The most interesting of all the finds, on account of the considerable modification it is bound to effect in the scientific ideas hitherto accepted regarding the relative origin of copper and bronze in the Mediterranean civilization, is the uncovering at Ortu Commidue alongside of some ancient copper mines of a great prehistoric foundry with all the furnaces for smelting and molds for casting just as they were abandoned thousands of years ago in the transition period between the ages of stone and bronze. The methods then obtaining in the Sardinian foundry industry, as here demonstrated, were most ingenious."

INDUSTRIAL INFORMATION

In 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

PYROFUSE

"Pyrofuse" is the name applied to a waste destroyer made by J. B. Prescott & Son, Webster, Mass. This method of destroying accumulated refuse is described in a series of illustrated pamphlets recently issued by the manufacturers. They present the various types of machines that this company make to meet requirements from that of the small family to the largest hotels, hospitals and other buildings where there is a considerable daily accumulation of refuse. These various types would seem to meet every demand of daily use. Two principal forms of Pyrofuse are shown: A portable machine, corresponding in its adaptability to any convenient location, in the same way as the gas range, and a fixed or stationary type, built in and becoming a part of the structure in which it is placed, as do the ash chutes, the vacuum cleaner and other permanent utilities.

Pyrofuse, as described by the makers, is a furnace of scientific construction designed to wholly burn all kinds of vegetables and animal waste in a safe, sanitary and economical manner, but primarily as an equally safe and sanitary receptacle for the accumulation of waste pending in its destruction. The fuel employed is gas. This may be either the usual city supply, natural gas or that generated from gasoline.

The makers state that the time necessary to destroy an average day's accumulation is about one hour, and direct attention to this as showing the very economical working of the machine. The care and operation of Pyrofuse, it is stated, requires no skill or special attention, as it automatically cleans itself in the process of combustion of its contents.

Messrs. J. B. Prescott & Son will furnish details and any other information that may be required.

STEEL FILING EQUIPMENT

The Berger Mfg. Co., whose mills are at Canton, O., with branch offices in principal cities, and who are makers of sheet steel products, have recently issued a series of pamphlets describing Berger steel filing equipment, which they describe as "the armor plate of modern business." The various types of equipment shown would seem to meet requirements of every class of business needs and provide safe storage for documents, protecting them as fully as is practicable from damage or destruction by fire.

This company will submit full particulars and catalogues on request.

A WASHERLESS FAUCET

A faucet from which the usual valve washers used in the seatings have been eliminated is illustrated and described in a leaflet recently issued by H. W. Johns-Manville Co., Madison avenue and 41st street, New York. It is stated that with this type of faucet leakage is impossible, as it shuts off "dead" and stays shut off. It is further claimed that the method of constructing this faucet prevents "water hammer," whistling under high pressure and that no solid particles can remain on the valve seat to impede the flow of water. Further claims are that it is as efficient for use with hot as with cold water and will outlast many types of faucets without any attention.

SAFETY TREADS

A form of safety tread for use on stairways, thresholds, ramps and other places where there is considerable traffic, and where a safe and sure footing is essential, is illustrated in a pamphlet issued by Universal Safety Tread Co., 141 Milk street, Boston, Mass., with branch offices in New York, Philadelphia and Chicago. The pamphlet illustrates a number of important installations for public service, schoolhouses, elevated structures and railroad buildings. The makers state that these treads are adapted for use on wood, iron, concrete or stone, and that they can be made and supplied in widths up to 12 inches in one piece and of any desired length.

They are constructed of a heavy steel base plate, in which openings are punched, making regular rows of teeth. Strips of lead, specially designed and hardened for durability and pressed into the openings, clamped into position by the teeth and clinched or riveted to the baseplate. This method, the makers state, insures a constantly increasing wearing surface of lead and in this way provides a safe and sure foothold under all conditions.

A later type manufactured by the same company consists of a steel plate to which is practically welded a non-slipping composition of lead and corundum. It is stated that the wearing qualities of this surface are remarkable, while it is as effective a non-slip tread as could be desired. It is particularly recommended for locations subjected to unusually heavy traffic, and would seem to offer advantages that will command the attention of those in search of a really efficient and durable safety tread.

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.

ARKANSAS

CORNING.—The Town Trustees have decided to secure a site and provide for the maintenance of a \$10,000 Carnegie Library.

JONESBORO.—Jonesboro will at an early date begin the erection of a \$30,000 city hall. Favorable action was taken at the meeting of the City Council and bonds are to be sold to raise money with which to build the hall.

CALIFORNIA

DAVIS.—The Regents of the University of California authorize the calling of bids for the construction of a new \$40,000 dormitory, a class room building with a seating capacity of 600, an addition to the dining room, an office building and other improvements at the University State Farm at Davis, Yolo County.

GRASS VALLEY.—A movement is being inaugurated to secure the construction of a new High School building. A new structure is needed, due to the rapidly increasing attendance.

LOS ANGELES.—Frederick Heinlein is the architect preparing working drawings for the two and three-story reinforced concrete residence to be erected at Oak Knoll for Baroness Rosa von Zimmerman, 223 South Rampart Blvd.

PASADENA.—Architects Parkinson & Bergstrom are completing plans for a class A reinforced concrete office building to be erected at the northeast corner of East Colorado St. and Marengo Ave. for the Citizens' Savings Bank of that city. The cost will be about \$100,000.

PLACERVILLE.—The site of the Western Hotel (the old Mountjoy House), which was recently burned by fire, is being cleared preparatory to the erection of a modern hotel. J. W. Shanklin, owner of the site, has been consulting architects regarding plans for the new building.

SAN FERNANDO.—Austin and Pennell have completed working plans for the manual arts building to be erected for the San Fernando Union High School district. It will be a one-story structure, of reinforced concrete construction.

SAN FRANCISCO.—Arthur T. Ehrenpfort has completed plans for a 4-story and basement brick hotel building to be erected at the southwest corner of Larkin St. and Olive Ave. The building will contain three stores and sixty rooms and have a pressed brick exterior.

A hotel and store building of three stories and basement has been planned by B. R. Christensen for Mary Marsicano, to be erected at the southwest corner of Broadway and Grant Ave. The building will be of brick and steel.

Plans are in preparation for an apartment flat building for Charles H. Cassasa upon his lot on the south side of Lake St., between 21st and 22d Aves. His architects are Rousseau & Rousseau.

An apartment building for Louise R. Barroillett will be erected at the intersection of Market and 14th. The building will cost \$40,000. Milton Lichtenstein is the architect.

SUISUN.—The Alden-Haile Estate interests are having plans prepared for a new hotel building to be erected here. The plans provide for a 3-story brick building with all modern equipments.

CONNECTICUT

BRISTOL.—Sealed proposals will be received by William A. Hayes, chairman building committee of School District No. 3, at the South Side school building, until Sept. 30, 1913, for the erection and completion of a six-room

brick school building to be built on Park St. in accordance with plans and specifications prepared by Walter P. Crabtree, architect, 272 Main St., New Britain, Conn.

HARTFORD.—The Board of Finance have approved a bond issue of \$1,000,000 toward the erection of a municipal building, to cost \$1,400,000 and a high school structure to cost \$450,000.

NORWICH.—The present Union Lodge structure No. 31, F. & A. M., is to be removed and will be replaced with an up-to-date building. It is planned to expend about \$30,000 on the building.

The National Manufacturing Co. has purchased a tract of land on Brown's Road and plan to erect a factory on the site. Attorney M. J. Byrne is one of the directors of the company.

Plans are now being figured for the store and tenement block to be erected at 179 Union St. for Vito Pace, 179 Union St. It will be a 4-story brick building, with artificial stone or limestone trimmings. It will be arranged for six tenements and two stores. Joseph T. Smith is the architect.

DISTRICT OF COLUMBIA

WASHINGTON.—Harman C. Baumgarten Company, Inc., have placed in the hands of Architect Cloughton West instructions for remodeling into a practically new building the southeast corner of Thirteenth and H Sts. N. W.

FLORIDA

JACKSONVILLE.—Ground will be broken shortly for the laying of the foundations of the building which is to be erected by the Mills-Wood Investment Co. on the lot on the south side of Adams St., east of the post office. The building, according to C. D. Mills, will be a substantial structure which will cost between \$75,000 and \$100,000.

An annex is to be built to the county court house, with W. B. Talley as architect.

WEST PALM BEACH.—A \$35,000 bond issue toward a new school has been voted favorably by the citizens of this town.

GEORGIA

ROME.—The movement to erect a city hospital has taken definite shape. It is purposed to raise some \$40,000 for the building and equipment. E. P. Harvey heads the list of the board of governors in charge of the proposed operations.

ILLINOIS

CHICAGO.—\$1,500,000 is to be spent for the erection of seven new school structures, following the indorsement of the building and ground committee of the school board here. Ella Flagg Young is superintendent of schools.

SPARTA.—The Chester Commercial Club has taken steps to launch a campaign for the erection of a new Court-house on its old site.

IOWA

CLEAR LAKE.—The Odd Fellows intend erecting a brick block here that will cost \$25,000.

DES MOINES.—A mammoth mausoleum, containing one hundred crypts and a marvel of architectural beauty, will be erected in Woodland cemetery at a cost to exceed \$150,000, according to plans and specifications that are now under preparation. A resident of this city will finance this project, aided by city officials here.

SUPERIOR.—The organization of a new rural consolidated school district in this district will be followed by the erection of a new school.

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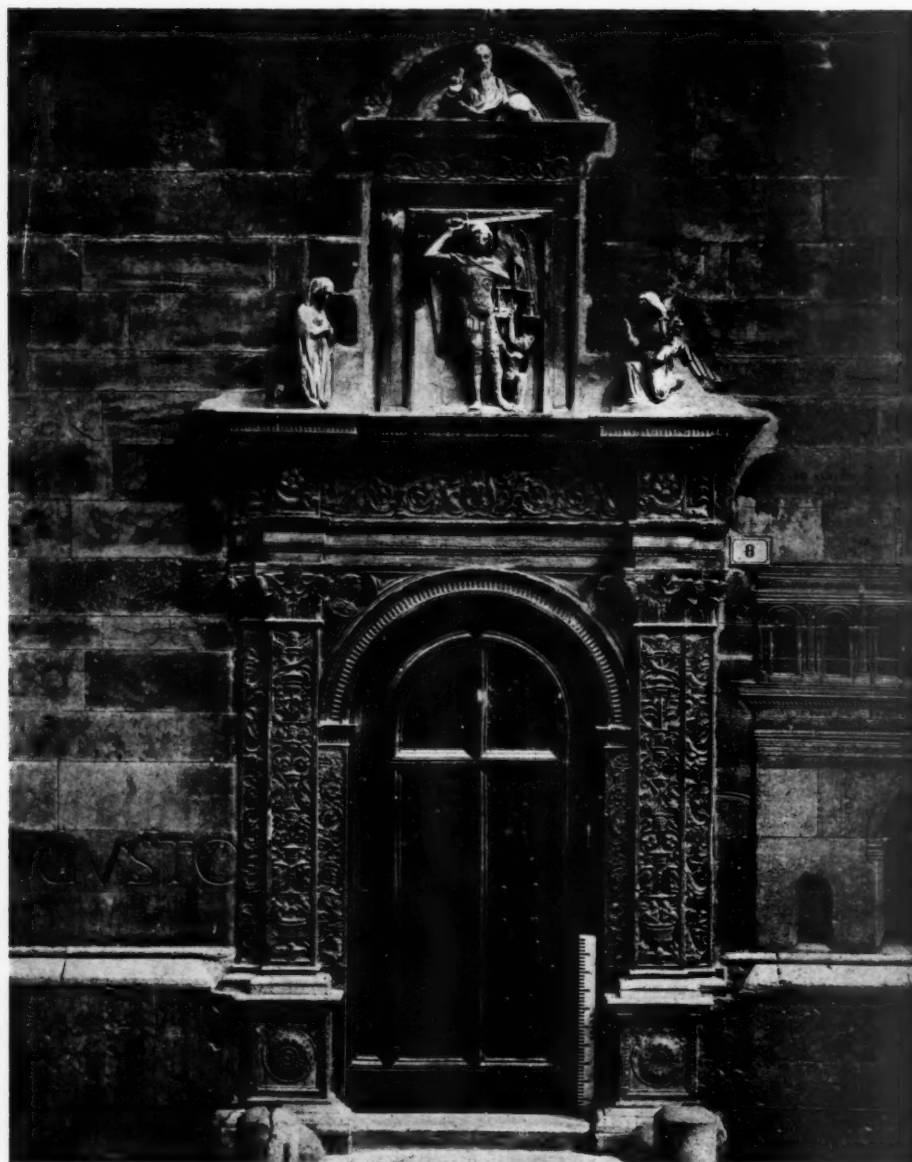
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