THE AMERICAN ARCHITECT

VOL. CX WEDNESDAY, AUGUST 9, 1916 NUMBER 2120

COMMONWEALTH ARMORY, BOSTON, MASS.

By JAMES E. MCLAUGHLIN, *Architect*

THE Commonwealth Armory recently completed at Boston, Massachusetts, was planned to house all the mounted troops in the City of Boston, and is so located as to be convenient to direct transportation lines from all parts of the city.

The building occupies a site on the edge of a plateau formerly part of the grounds of the Allston Golf Club, and on the East faces directly up the Charles River Basin, affording a splendid view of the city itself. The main tracks of the Boston and Albany Railroad pass close to the rear of the building, and it is the intention to build a spur track from the railroad along one side of the training field and under the rear stable. This track will bring hay and grain supplies directly into the stables, and by means of a loading platform to the level of the field, mobilization of the troops will be greatly facilitated.

At the present time, the building houses the First Squadron of Cavalry, Battery "A" of the Field Artillery, Signal, Ambu-

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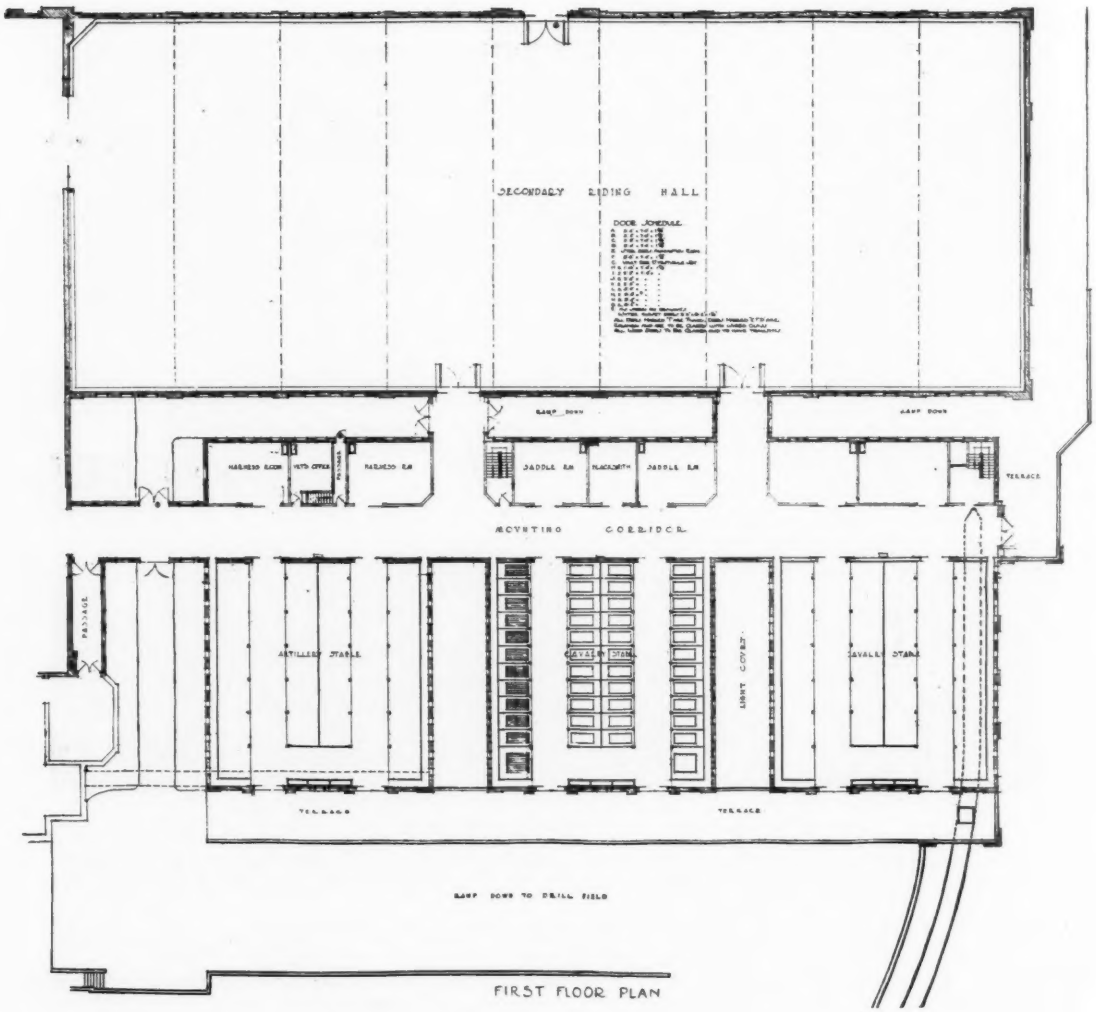
lance and Field Hospital Corps, and general headquarters. These quarters for the men are grouped on two sides of the main riding hall which is 175 ft. x 300 ft. long. At the rear of the main riding hall and opening directly into it is a secondary riding hall 100 ft. x 200 ft. long and on one side of this hall are the stables and quarters for the horses.

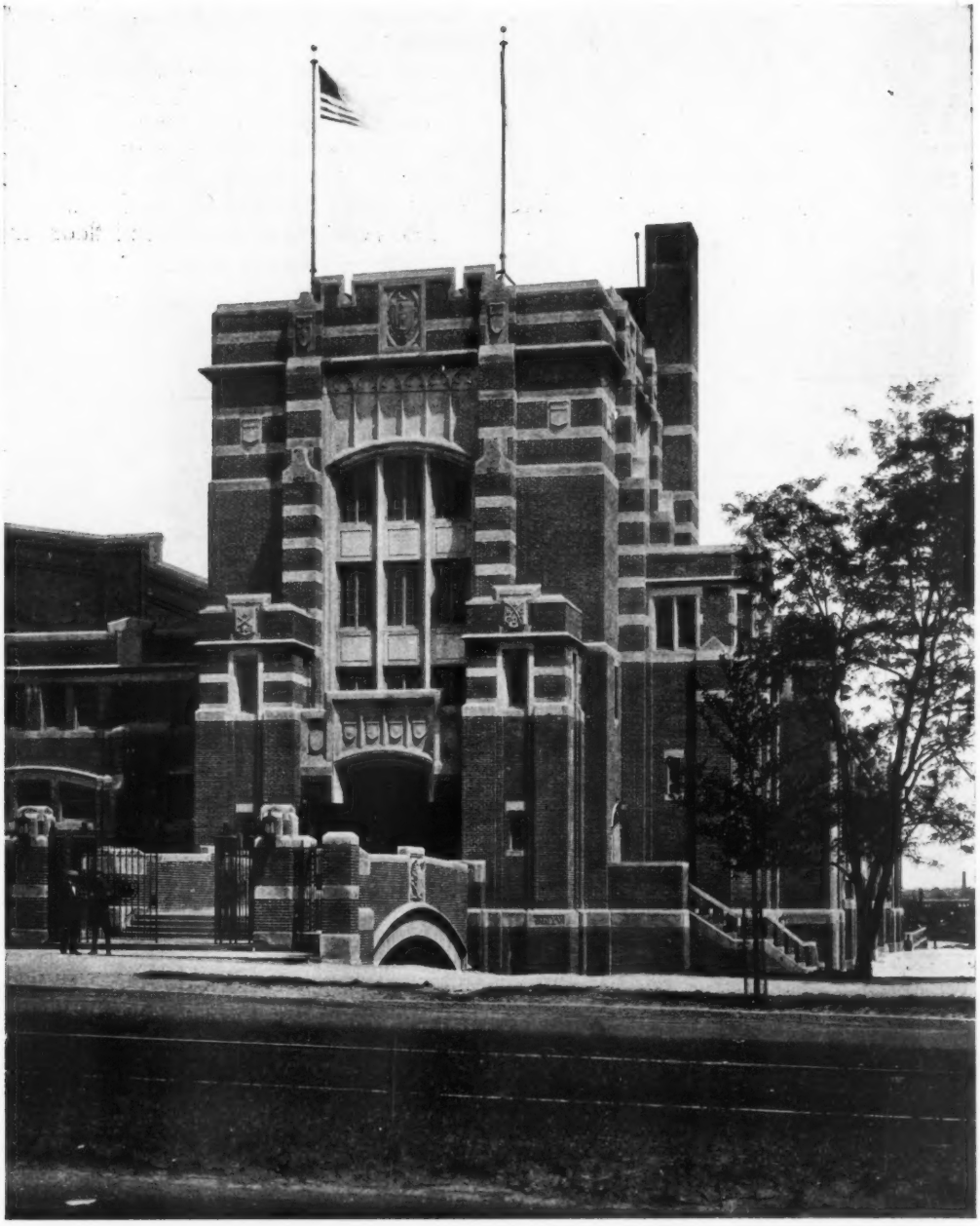
The mounting corridor in the stables opens directly into both riding halls. On the east side of the main riding hall are the gun sheds for the Field Artillery, opening on the opposite side onto a broad terrace from which point the guns can be wheeled by hand onto the loading platform for entraining or can be taken mounted to the field for drill.

The stables were planned in small units for forty-four horses each to prevent the too rapid spread of contagion, and are wonderfully light and airy.



STABLE BUILDING

The ranges are located in the sub-basement and are probably the finest indoor ranges in the country. The rifle ranges are for sub-caliber practice and contain five targets each. The revolver ranges are open the entire length, contain three



ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*

disappearing targets similar to those in use on outdoor ranges and permit of a full 75 yds. target practice. The lights are protected by concrete lugs and the whole length of the range is inclosed in concrete walls, thus permitting the use of high-power automatics for target practice.

The recreation rooms are grouped in the front part of the building, directly below the main entrance and consist of billiard room, bowling alleys and mess hall.

open the balconies of the main riding hall.

The Signal Corps is located in the tower and is to have a high-powered wireless outfit which has not yet been installed.

The exterior of the building is of red water-struck brick with lime-stone trimmings and the construction of the building is fireproof throughout, except the roofs of the riding halls, which are of wood plank carried on steel trusses.

The basement and ground floor are of

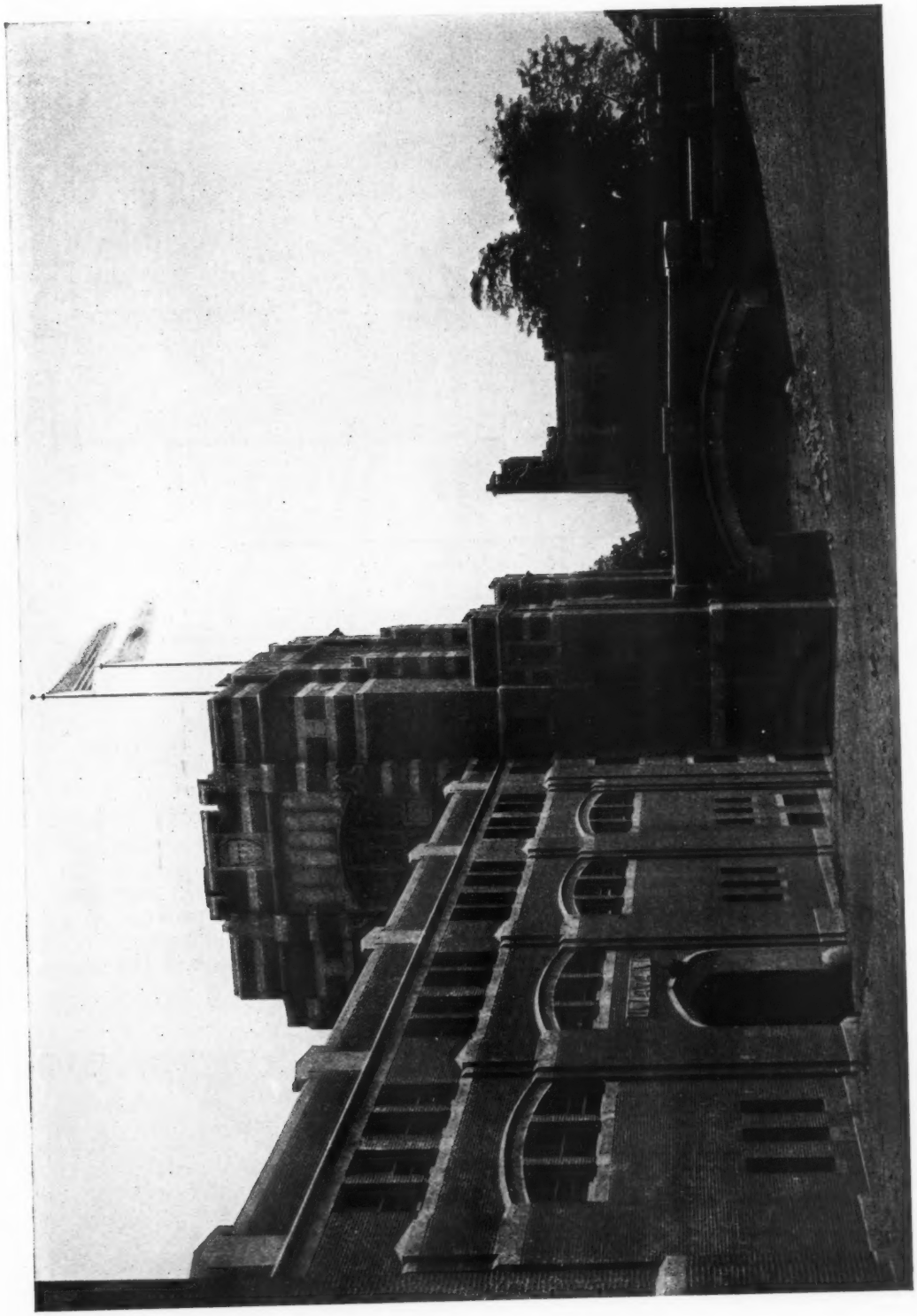
DETAIL OF MAIN LOBBY

Storage rooms for all organizations are placed under the terrace at the level of the training field on the east side of the building, and are so arranged that two transport wagons may be kept in each storage room and the floor of the wagons is at the same level as the storage.

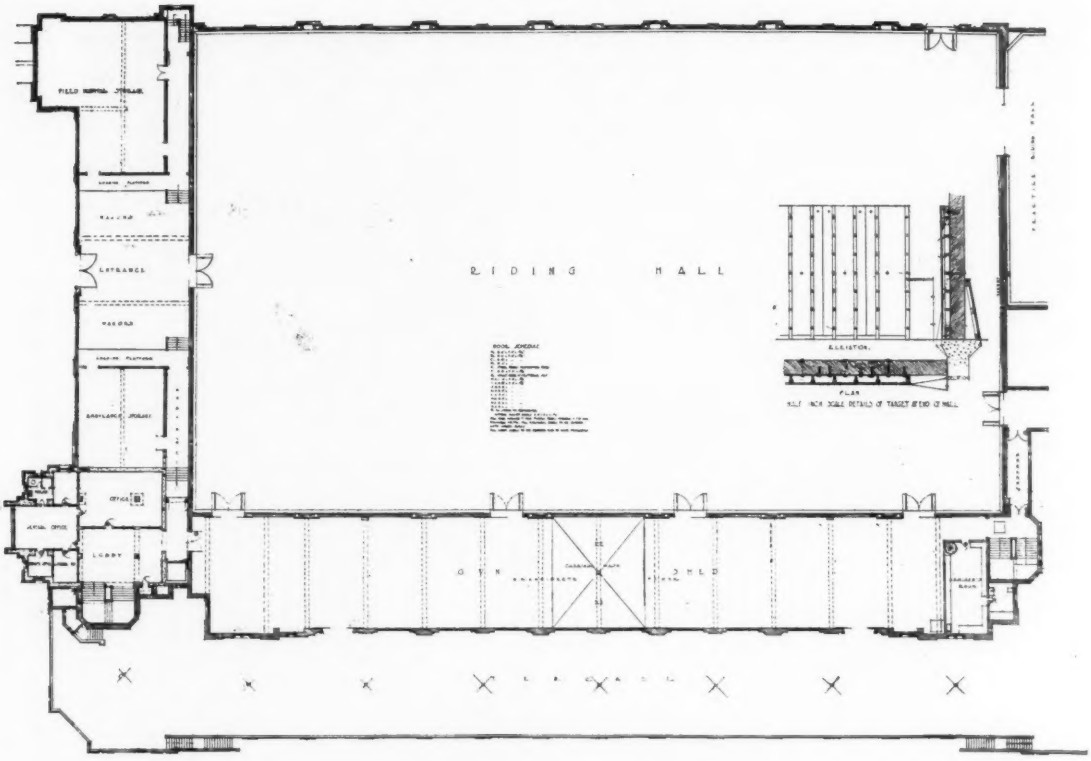
The main entrance to the building is over a bridge from Commonwealth Avenue into an ample lobby, leading out of which are two main corridors from which

flat slab construction with two-way reinforcements and the upper floors are of beam and slab reinforced concrete, carried on steel girder beams spanning from wall to wall.

There are two rather interesting bits of construction in reinforced concrete work: The main east wall of the building, rising from the terrace level is carried out over the flat slab on the base course, which is of concrete and reinforced



ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.
MR. JAMES E. McLAUGHLIN, *ARCHITECT*



GROUND FLOOR PLAN

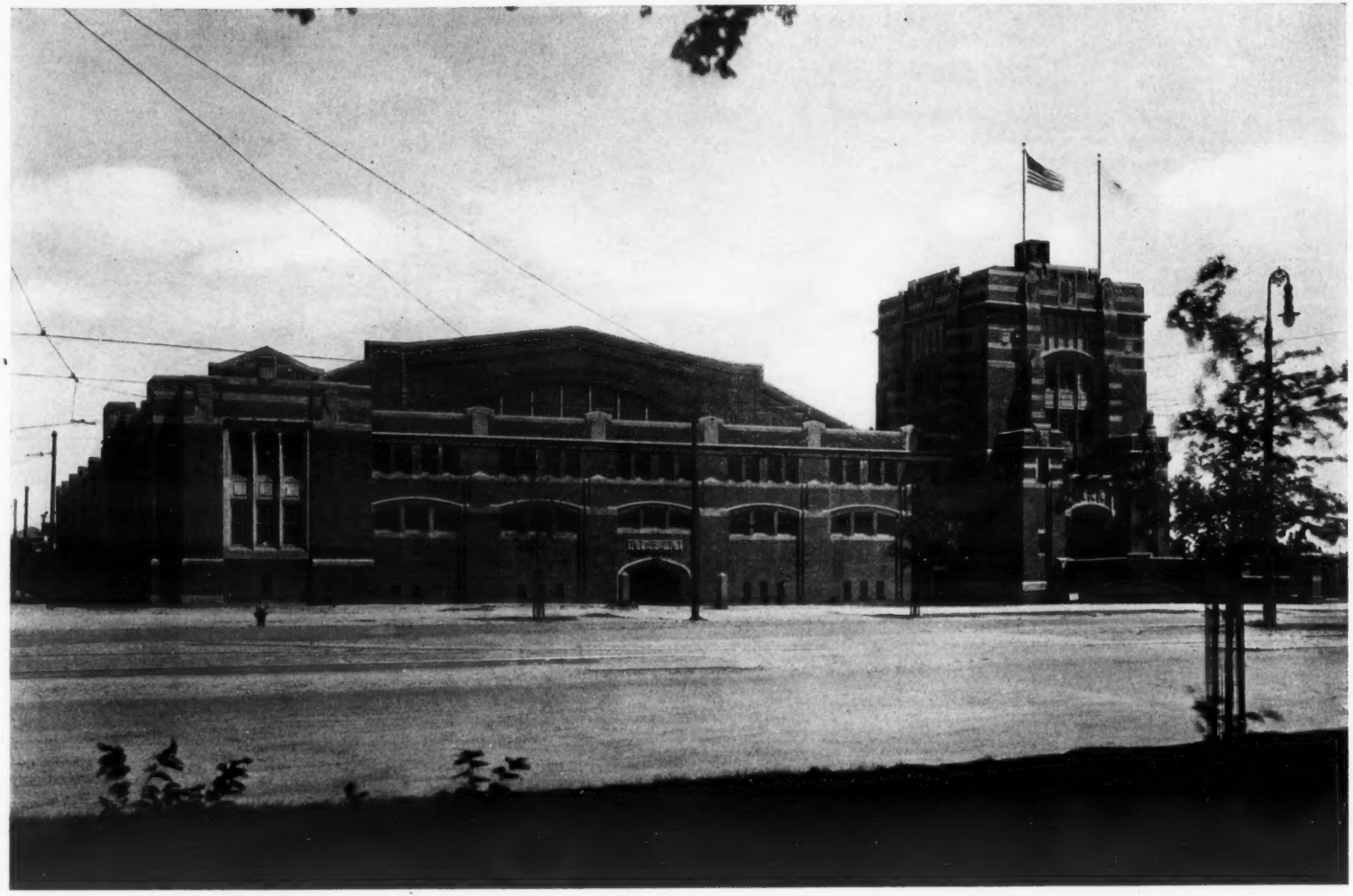
for cantilever action. The balcony around the main riding hall is a continuation of the first floor slab and carries out over the walls of the riding hall as a cantilever. It presents a perfectly smooth appearance on its underside and is only 4 in. thick at the outer edge.

The bridge to the street is constructed of two segmental reinforced concrete arches 16 in. thick and carries a deck slab approximately 9 in. thick. These arches are faced with brick and limestone on their outside faces.

It is rather interesting to note that the building was so planned to fit the grade of the lot that no surplus excavation was required to be removed.

The cost of this work was approximately $600,000 and proved of great value to the State in the recent mobilization of troops being sent to the Mexican border.

XUM



ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*

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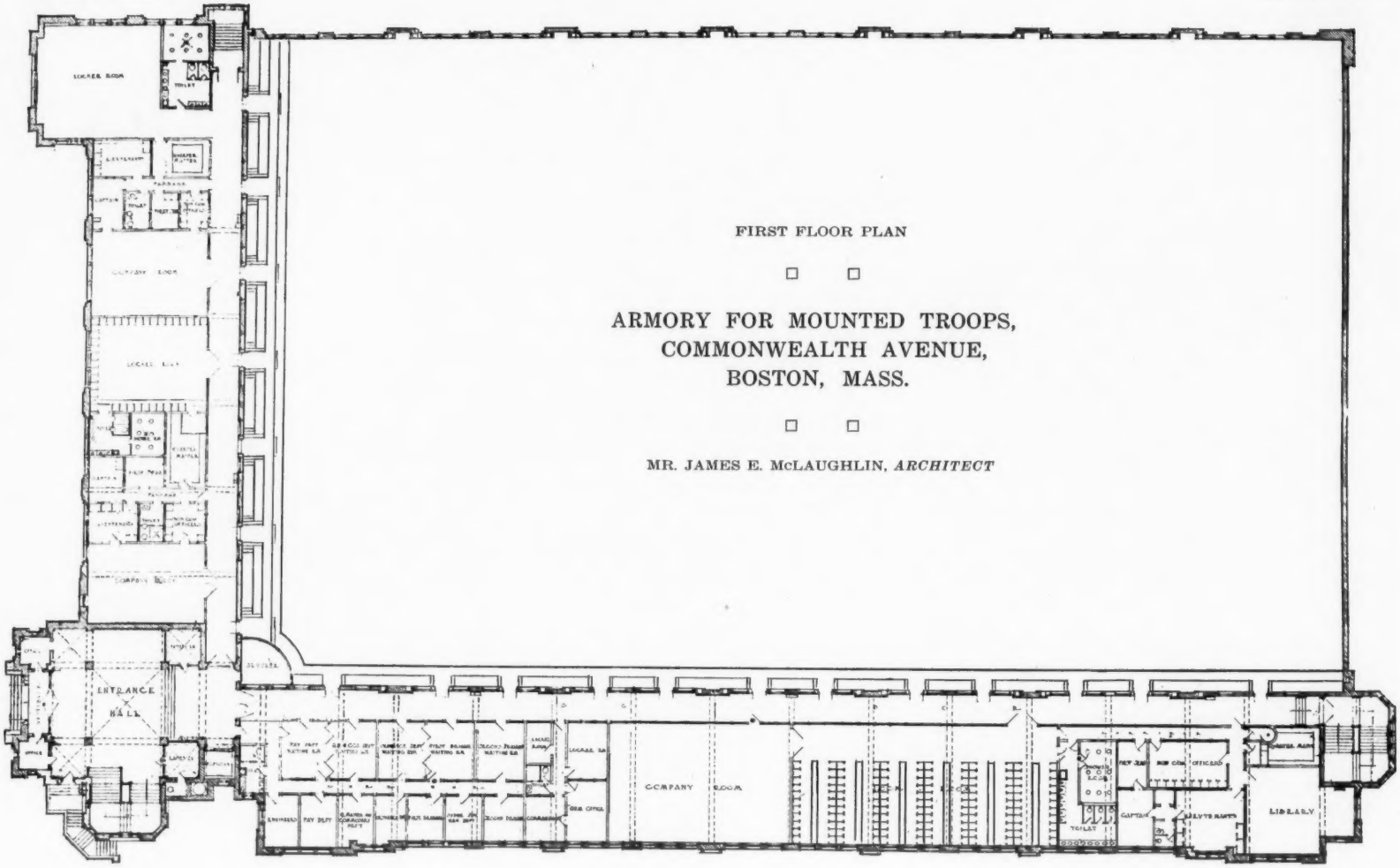


FIRST FLOOR PLAN

□ □

ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.

□ □

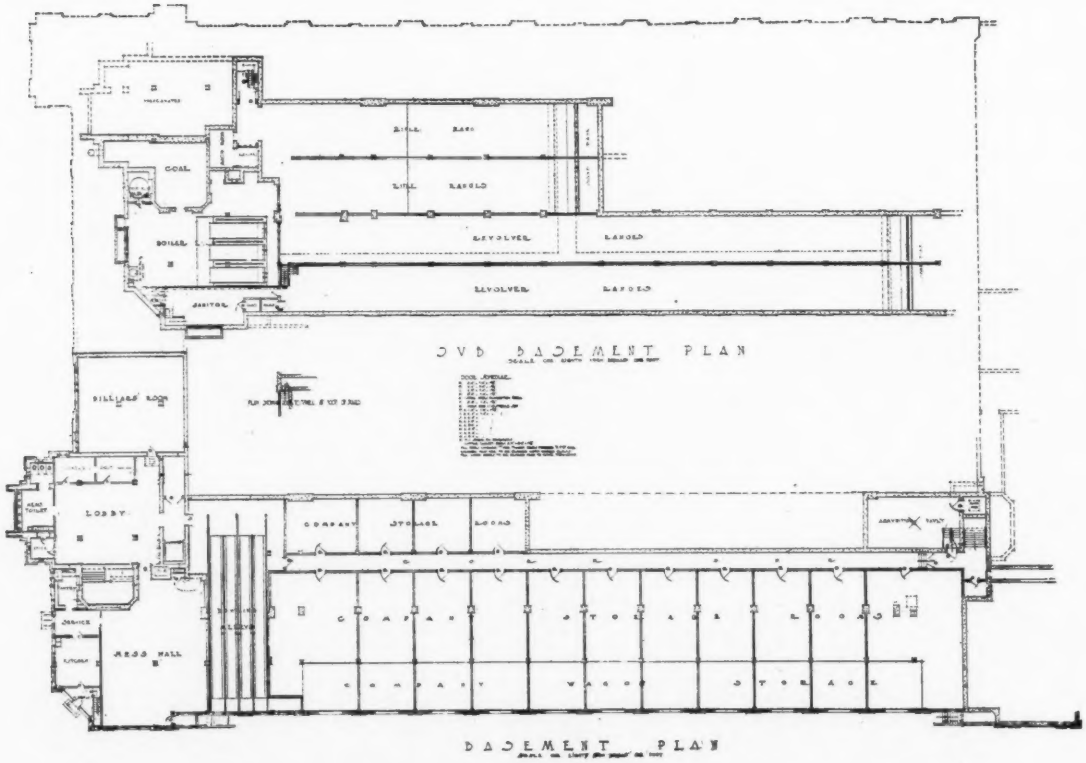
MR. JAMES E. McLAUGHLIN, *ARCHITECT*

XUM

SECOND FLOOR PLAN
ARMORY FOR MOUNTED TROOPS,
COMMONWEALTH AVENUE,
BOSTON, MASS.
MR. JAMES E. McLAUGHLIN, ARCHITECT
SIGNAL CORPS OFFICES
LODGE
CAPTAIN
SQUADRON ROOM
OFFICERS' LIVING RM
LIEUT.
LOCKER ROOM
COLLIDOR
GUN ROOM

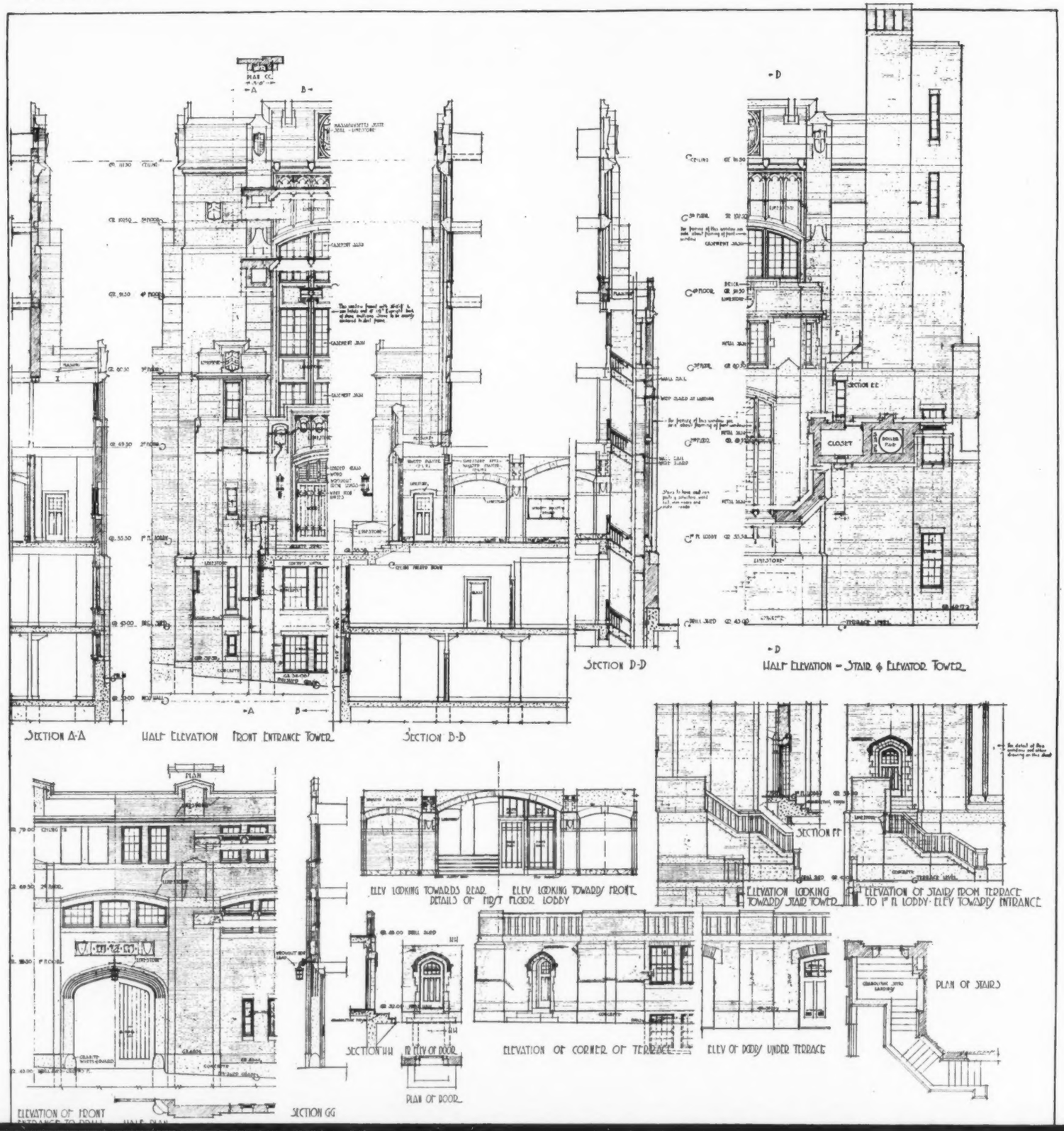
XUM

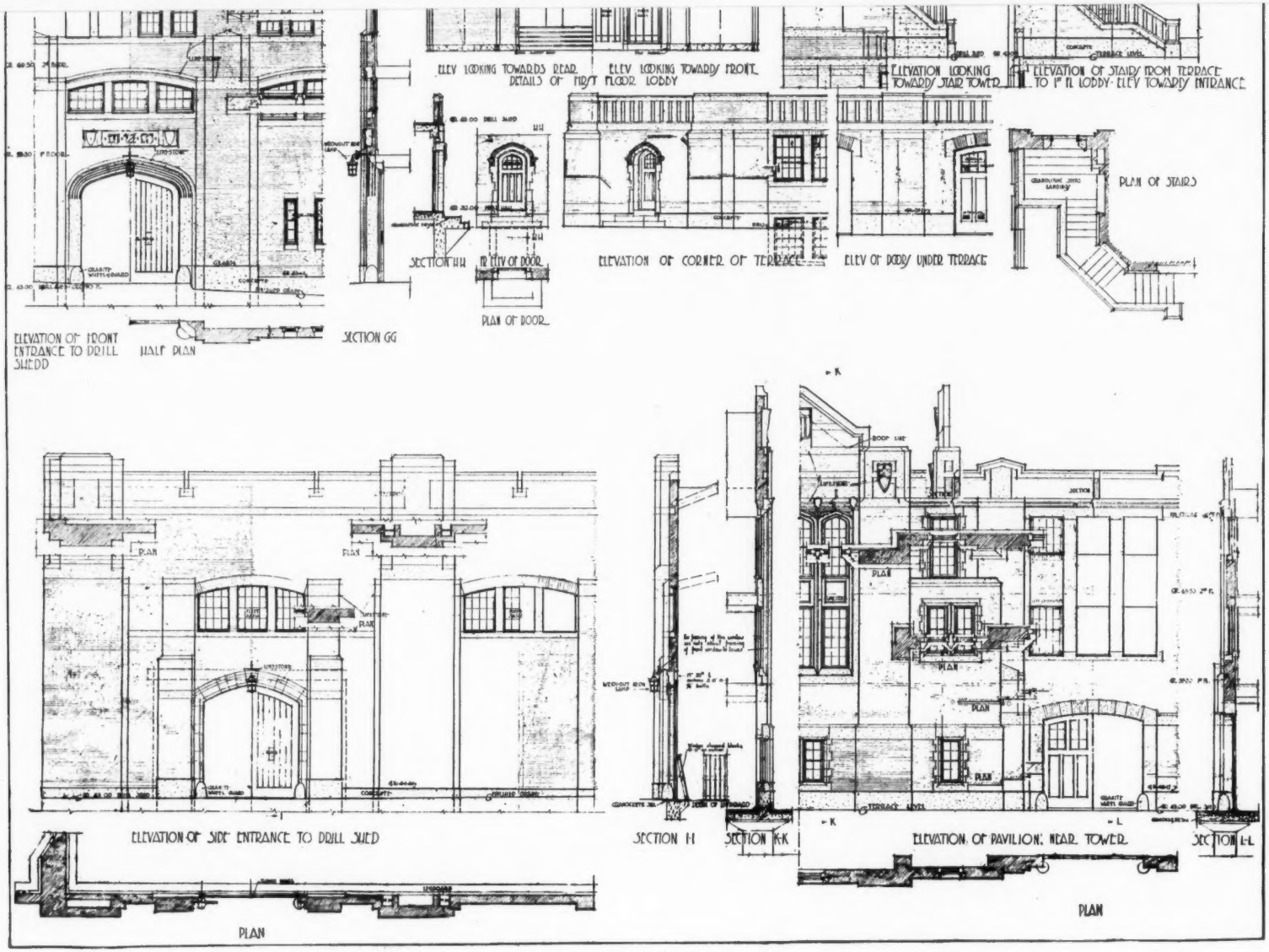
STABLE BUILDING



ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*


SECTION A-A
HALF ELEVATION FRONT ENTRANCE TOWER
SECTION B-B
SECTION D-D
HALF ELEVATION - STAIR & ELEVATOR TOWER
CLOSET
SECTION EE
ELEV LOOKING TOWARDS REAR
ELEV LOOKING TOWARDS FRONT
DETAILS OF FIRST FLOOR LOBBY
SECTION FF
ELEVATION LOOKING TOWARDS STAIR TOWER
ELEVATION OF STAIRS FROM TERRACE TO 1st FL LOBBY - ELEV TOWARDS ENTRANCE
PLAN OF STAIRS
SECTION HH
ELEV OF DOOR
PLAN OF DOOR
ELEVATION OF CORNER OF TERRACE
ELEV OF DOORS UNDER TERRACE
ELEVATION OF FRONT ENTRANCE TO DRILL
HALF PLAN
SECTION GG



ARMORY FOR MOUNTED TROOPS, COMMONWEALTH AVENUE, BOSTON, MASS.

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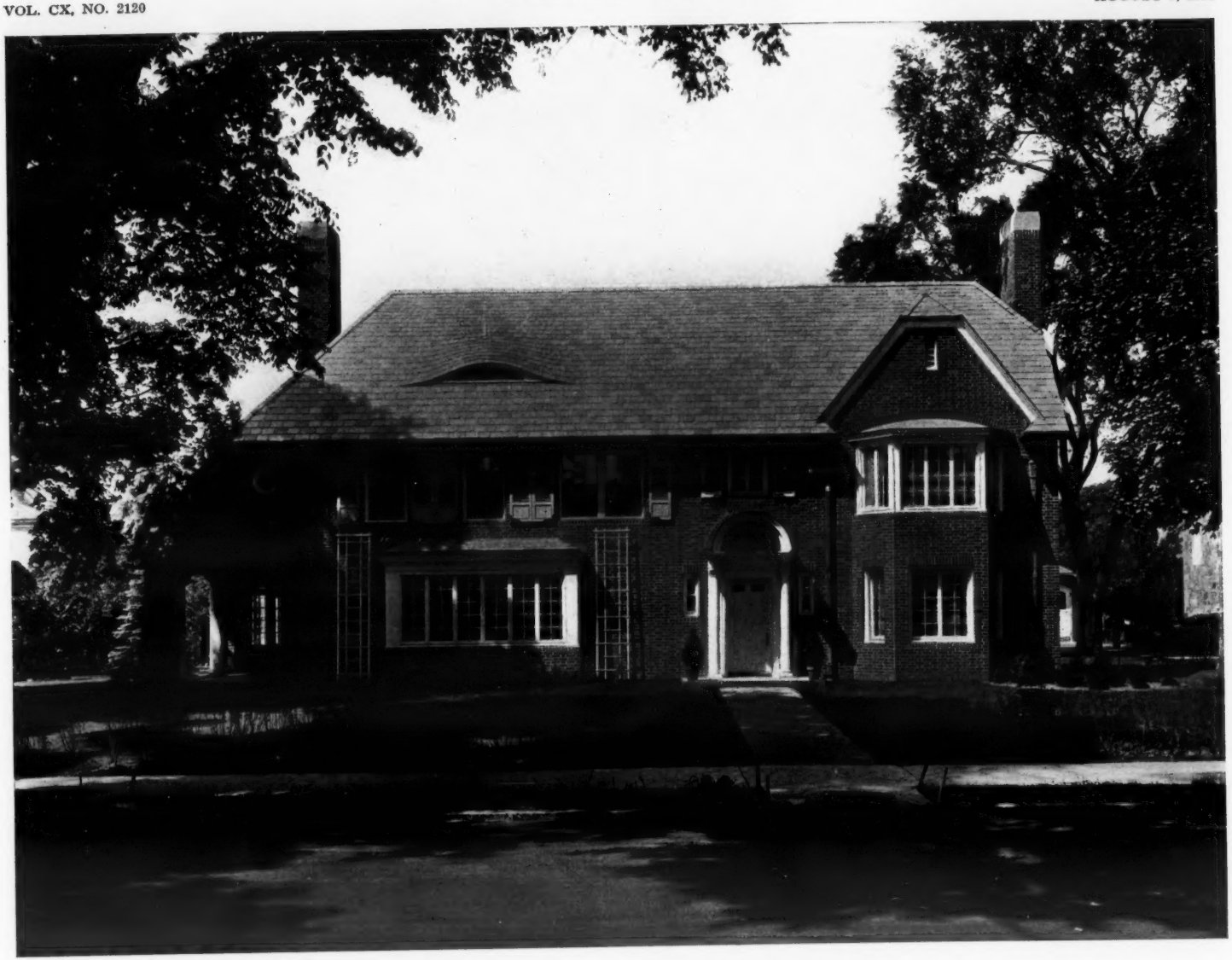

HOUSE OF MRS. S. S. CUNNINGHAM, LYNN, MASS.

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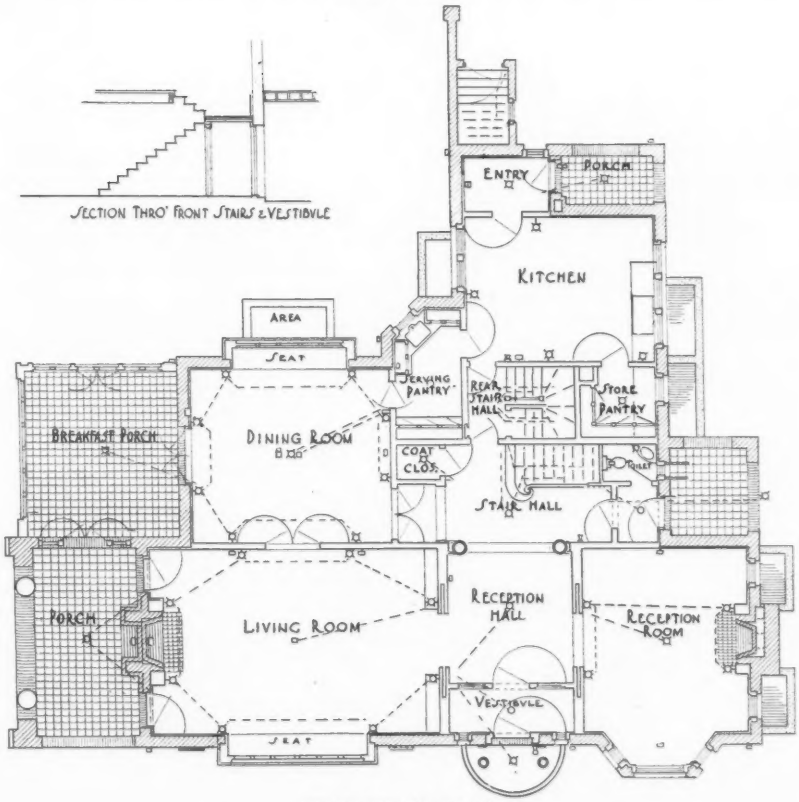
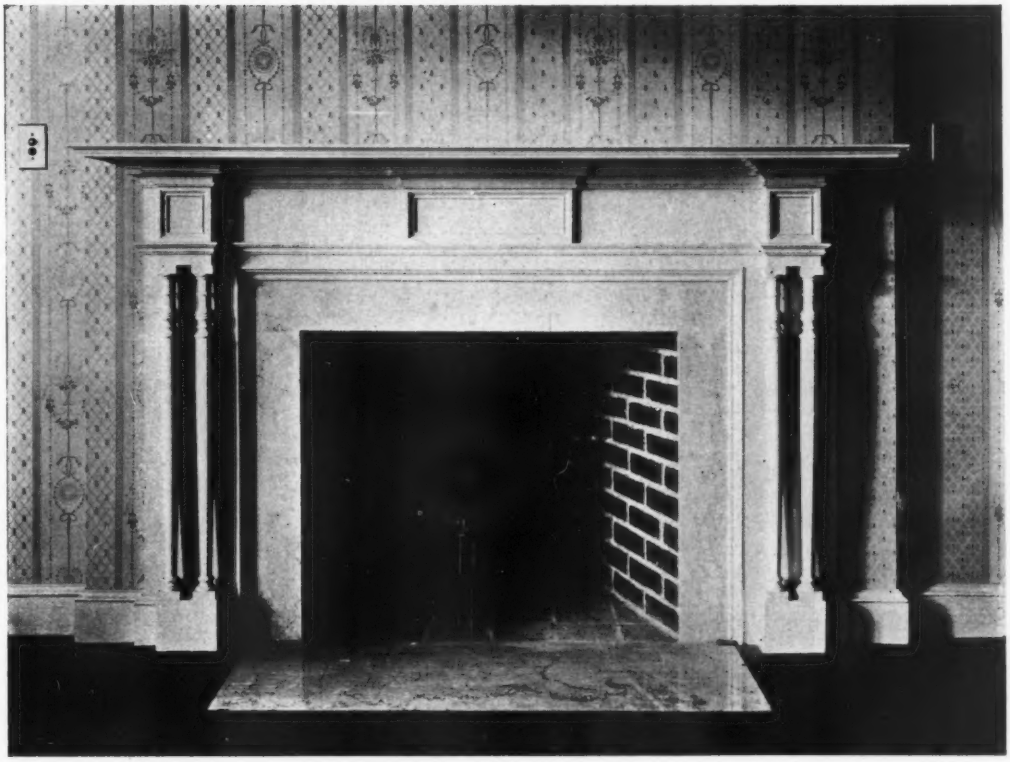
STAIR HALL



FIRST FLOOR PLAN

HOUSE OF MRS. S. S. CUNNINGHAM, LYNN, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*



MANTELS IN HOUSE OF MRS. S. S. CUNNINGHAM, LYNN, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*

XUM

REAR VIEW

GARAGE

HOUSE OF MRS. S. S. CUNNINGHAM, LYNN, MASS.

MR. JAMES E. McLAUGHLIN, *ARCHITECT*

XUM

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VOL. CX AUGUST 9, 1916 No. 2120

NEW YORK CITY ADOPTS REGULATIONS DESIGNED TO RESTRICT HEIGHT, AREA AND LOCATION OF BUILDINGS

PROBABLY the most frequently heard comment, anent the building zone and heights resolution passed by the New York Board of Estimate on July 25 is that it constitutes the most important step in the development of New York City taken since the construction of the subways. That this law, which became effective on its passage, received a total of fifteen votes in the Board of Estimate with but one in opposition to it indicates a unanimity of opinion regarding its effect on the city's future that undoubtedly extends to the general public. The new law is confined closely to the phases of building it is designed to regulate and control, which are the limitation of building heights, with the related one of court areas, and the establishment of retail, residential and manufacturing zones, in which mav be constructed only such buildings as belong to these respective classes.

The resolution does not, as has been assumed by some commentators, entirely prevent the building of tall structures, but it does require that they shall not present an unbroken façade for a height of more than two and one-half times the width of the street on which they front, if erected in the lower section of Manhattan, or in what is generally termed the office building and financial district. In residential sections buildings will be permitted only as high as the width of the street on which they face. Tenement and apartment houses can be built one and one-quarter, or, in some cases, one and one-half times as high as the width of the street on which they front. A height of twice the street is allowed for buildings in the remaining portions of the more intensively developed commercial and industrial sections in a broad area extending through the center of Manhattan Island from the lower office and financial section north to Fifty-ninth Street. Buildings carried to greater heights than those indicated for the various zones must be reduced in floor area by setting the walls back from the building lines at the heights specified.

Various exceptions to the general rule for determining the allowed heights of buildings are noted; for example, in the case of a lot located in the office and financial section surrounded by tall buildings, a building may be erected thereon to the average height of the buildings adjoining it on either side and the building across the street. This is but one of a number of exceptions in which may be discerned an attempt to prevent, in so far as is possible, an injustice being done to the owner of undeveloped property in districts where the law will work the greatest changes.

Since the establishment of zones was accomplished in a manner intended to create the least possible confusion and disturbance in the present arrangement and location of buildings falling under the various classifications, it naturally follows that the designated districts are somewhat scattered and irregular in form, so that the zone map of Manhattan and other boroughs showing commercial, tenement house, residential and manufacturing districts gives ocular proof of the accidental and indiscriminate manner of

development that has obtained in this city heretofore.

What might perhaps be considered an indication of weakness or reluctance to take the initiative, on the part of the Commission whose report formed the basis of the new law, is the establishment of an "undetermined" district. This area, which can be used for any purpose except that of erecting high office buildings, comprises most of the water front and adjoining property in Manhattan and other boroughs, and certain other sections in all boroughs where the development promises to be industrial. These undetermined districts may be built up as residence or business districts and will be subject to future regulation, according to present plans, when their character is more fully developed. This would seem to be permitting these sections to go through the same undirected, haphazard sort of evolutionary process that has been so disastrous to other sections and has constituted the chief reason for the appointment of the Building Restrictions Commission in the first instance. Why it should not now determine proper lines along which the development in these various unrestricted areas might proceed with greatest advantage to both individual owners and the sections in general is not entirely clear. To the average person it would seem in fact that the most advantageous time to impose restrictions would be before development had taken place rather than after its character had been determined by chance, with strong probability of a change being necessary in a considerable portion of the uncontrolled section. It is to correct mistakes due to lack of restriction and direction that the new law has been passed, and to leave part of the metropolitan area uncovered by its provisions gives to it something of the aspect of an incomplete measure.

The selfish instincts which are generally supposed to exist to a greater or less degree in all human beings are inevitably aroused by conditions such as were created by the threatened passage of this measure, and that a sorry exhibition of greed to be satisfied at the city's expense was presented, is perhaps what might have been expected. If the new law were to be of benefit to the city at large, as was generally conceded it would be, the measure of that benefit would be the degree of thoroughness or completeness with which it could be applied. In other words, the greater the part of the city's development, present as well as future, which could be controlled by these restrictions, the greater would be the advantage to the community. Notwithstanding this obvious fact, with the passage of the law impending we find individual owners—many of them putative leaders in the financial and business affairs of the city—overwhelming the Building Department with plans for structures, none of which could be constructed under the new law. As a matter deserving special notice, the striving for selfish advantage which building under the old law was thought to afford was so great that during the week preceding the law's adoption the records for plans filed in the Building Department of Manhattan for an equal period were greatly exceeded. On the day that the new law was finally passed, and prior thereto, plans for buildings aggregating in cost more than $22,000,000 were filed. Fortunately the names of their prospective owners are a matter of record, so that, if it seems desirable, they may be given a conspicuous place in a list of those who have profited, or at least were willing to profit, at the city's expense.

But regardless of initial abuses inspired by cupidity (which perhaps were unavoidable) if the actual operation of this law results in maintaining such conditions of street traffic that the city's chief hotel, club, theater and shopping centers may be permanently maintained in the locations best suited to them; if stability is given to real estate values; if comfort and convenience is afforded the public generally in anything like the degree that is now confidently expected, the statement that this measure marks a new epoch in the physical development of American cities is in no wise exaggerated.

CURRENT ARCHITECTURAL PRESS

THE leading article in *The Architectural Record* for July is contributed by Professor A. D. F. Hamlin of Columbia University and reviews twenty-five years of American architecture.

Commencing with the year 1891, which Professor Hamlin states "may be fitly taken as marking the close of the early renascence of American architecture, and the beginning of a new period of activity and progress," the article considers the intervening quarter century and seeks to trace the influences that have caused the very decided improvement in architecture in this country.

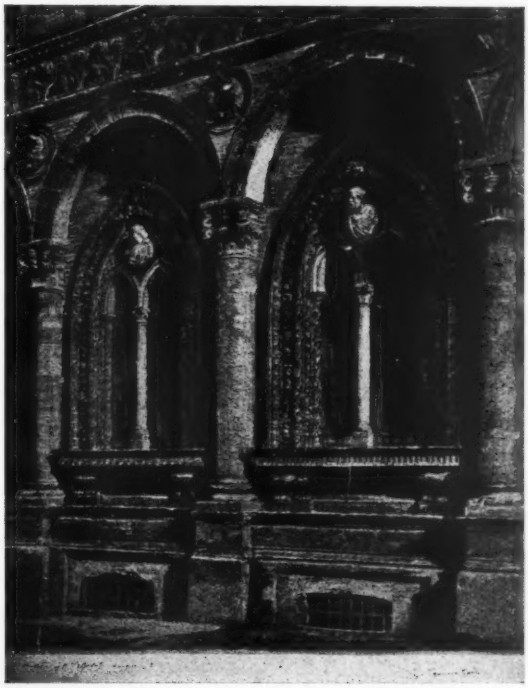
Naturally Professor Hamlin believes that the educational activities and a growing influence of the French school have been among the most powerful factors at work. The article will be found of considerable interest, although the man in practice may not in every instance be prepared to accept all of the deductions set forth.

(FROM THE JOURNAL OF THE A. I. A.)

PRIORY FARM. ETCHING BY F. L. GRIGGS

A house at Monroe, New York, by Bowen Bancroft Smith, is very completely illustrated in this issue. A branch library in Philadelphia, by Albert Kelsey, is over-illustrated to a point of space-filling. In the portfolio of Current Architecture, houses by Wilson, Eyre & McIlvaine and Adams & Adams are illustrated, and several views of a house on Gardner's Island, N. Y., built in 1774, are added. The views of the latter, while not perhaps in the "current" architectural class, are of sufficient architectural interest to warrant their publication.

(FROM THE INTERNATIONAL STUDIO)



"THE WINDOWS OF THE OSPEDALE MAGGIORE (MILAN)." ETCHING BY CARLO CASANOVA

A feature of this issue is an article on "Church Planning in the United States," with special reference to the Denominational plan. It is by Richard Franz Bach, who begins his discussion with reference to what is logically taken as the antecedent of church planning in this country,—the meeting house,—and traces the development up to the present day. Many interesting plans are reproduced.

An article in the July issue of *The International Studio* by Selwyn Brinton, M.A., is a most graceful appreciation of the work of D. C. French, sculptor.

(FROM ARCHITECTURE)

HOUSE, ALFRED D. CHILDS, ENGLEWOOD, N. J.
CARETTO, FORSTER & KING, *ARCHITECTS*

In reviewing the work of the sculptor in America, Professor Brinton has unhesitatingly selected that of French as representing the highest and broadest development of the sculptor's art in Amer-

(FROM THE ARCHITECTURAL RECORD)

NORTH ELEVATION — SANTA GERTRUDIS RANCH HOUSE, THE HOME OF MRS. H. M. KING, NEAR KINGSVILLE, TEXAS
ADAMS & ADAMS, *ARCHITECTS*

ica by a living artist. His article is a thoughtful survey of the art in this country, and is eminently just in its conclusions.

There is little of actual architectural interest in this present issue of *The International Studio*, but, as usual, it is replete with an accurate account of the happenings in the field of art.

* * *

The cause of good craftsmanship in this country should receive impetus as the result of the July issue of *Good Furniture*. Mr. William Laurel Harris, in the leading article on "The Dilemma of the Craftsman in Our Industries," touches

(FROM THE INTERNATIONAL STUDIO)

A COVER DESIGN, LADIES' HOME JOURNAL
BY W. J. AYLWARD

the heart of the whole discussion, when he states that the artist, artisan and craftsman (note the fine distinctions) of our day are ground between the upper and nether millstones of commercial life.

We are in full accord with any effort that will effect a revival of good craftsmanship, and in the efforts that have been made along these lines for two years past, no more valuable co-operation has been given than in this present instance.

Other features in this issue are articles on "Foreign Artists in French Furniture

Design," by Richard F. Bach, well written and completely illustrated, and a reprinted address on "The Practical Designer in the Industries," delivered by

(FROM GOOD FURNITURE)

A RARE EXAMPLE OF 15TH CENTURY FRENCH WORKMANSHIP IN A *CRÉDENCE* OF PURE GOTHIC DESIGN, IN CARVED OAK.

Lachlan MacLachlan, in Grand Rapids, last May.

* * *

Description and illustration of a country house in Middleburg, Va., Peabody, Wilson & Brown, architects, is the principal feature of *Architecture* for July.

The whole work, inside and out, is a very satisfactory interpretation of the best traditions of Georgian architecture, and has been handled in an intelligent and reverential manner. In no State in the East has there been developed a better type of Georgian than in Virginia. Its greatest progress was at one time along the banks of the James River. It is a satisfaction to find replacing these historical examples, now sunk to decay, an estate that in its architectural merit is a worthy successor to that of an earlier generation. The descriptive article is also worthy of commendation. It is an intelligent description of features not discernible in the illustrations.

Other examples of recent work illustrated in this issue are a country house by Caretto, Forster & King, the addition to the Kenyon County, Ky., court house, Robertson & Fahnestock, architects, a school building in Toledo, Ohio, by Ed-

(FROM THE ARCHITECTURAL REVIEW)

DETAIL, DOORWAY, HOUSE FOR GUSTAVUS BABSON, ESQ., OAK PARK, ILL.

TALLMADGE & WATSON, *ARCHITECTS*

ward M. Gee, and a number of small country houses, not as well selected for their architectural integrity as is usual with this journal.

"Building the New Technology," by H. E. Kebbon, is the leading article in *The Architectural Review* for June. It is illustrated by a series of construction views.

A later and more authoritative article,

(FROM ARCHITECTURE)

ADDITION, KENTON COUNTY COURT HOUSE, INDEPENDENCE, KY.
ROBERTSON & FAHNESTOCK, *ARCHITECTS*

by Mr. William Welles Bosworth, the architect of the buildings, will be found in THE AMERICAN ARCHITECT issue of July 26.

* * *

In the third of a series of articles on "The Relation of Art to Education," by

(FROM THE ARCHITECTURAL REVIEW)

HOUSE AT GERMANTOWN, PA.
DÜHRING, OKIE & ZIEGLER, *ARCHITECTS*

Frederick L. Ackerman, in the July issue of *The Journal of the American Institute of Architects*, the architectural school is discussed.

Mr. Ackerman's contention that the architectural student needs a closer and more intimate contact with the vital forces of the present is, in our judgment, unquestionably correct. It is further held that "when many architects have all been stimulated by a definite impulse related to the social state in which they live, it is then that an indigenous architecture results."

Condensed in the foregoing sentence is an irrefutable statement which forms

(FROM THE ARCHITECTURAL RECORD)

DINING ROOM LOGGIA—HOUSE OF SCHUYLER SCHIEFFELIN, ESQ., MONROE, N. Y.
BOWEN BANCROFT SMITH, *ARCHITECT*

the basis for a deep and strong argument for better educational methods.

Mr. Ackerman's series of articles show a thorough grasp of his topic and are important contributions to a subject that should and probably will engage the attention of future conventions of the Institute to a greater extent than ever before.

The designs of Stephen Hallet for the National Capitol are described in this issue by Wells Bennett of the University

of Michigan. Mr. Hallet, it is stated, was the first professional architect of French training to work in the United States.

In the department of the Society of Beaux-Arts Architects, the illustration of awards in judgment of May 16 is made.

A pictorial feature of this issue is the further illustration of the etchings of F. L. Griggs. They have been admirably reproduced.

* * *

The Western Architect for June (received July 22) is a special and much enlarged issue devoted to illustrations of St. Louis architecture, old and new.

It is frankly stated in the leading editorial that in the presentation of this special issue "there is an element of professional sentiment, as well as the apparent seeking for the loaves and fishes of architectural journalism." This frankness is commendable, and entirely disarms criticism or allusion to features that account for this issue's abnormal proportions. It is justice to state that this grouping of good examples of work by the profession in St. Louis has been admirably accomplished and will no doubt be much appreciated.

* * *

The Brickbuilder for July, not received until August 2, will be reviewed and indexed with the Current Architectural Press for August in our issue of September 13.

INDUSTRIAL INFORMATION

Loomis System Filtration

Loomis-Manning Filter Distributing Company, Philadelphia, Pa., has recently issued a catalog presenting in detail the merits of the Loomis system of filtration.

It is stated in the preface that sanitary experts, scientists, engineers and others have written and spoken so extensively concerning the necessity of filtering the water we use, and the benefits derived therefrom, that it is unnecessary in this booklet to argue the matter. The only question remaining is one of methods and means. It is to answer this question and meet the demand for an apparatus that will insure protection to health, that the Loomis Improved Water Filter has been produced.

It is claimed that the perfect filter should obviously combine simplicity, efficiency, economy and durability, and that the Loomis possesses these features in an unusual degree. In the matter of simplicity it is explained that in this apparatus the entire process of filtration and cleansing is controlled in these filters by a single lever moving over a registered dial

on which are found the following stations: Filtering, Filtering to Waste, Washing Filter Bed, and By Pass; thus showing by the location of the lever exactly what the filter is doing and rendering mistakes by attendants impossible. There is no complicated system of valves, cocks or other attachments to be handled. It is also stated that these filters are economical on account of their simplicity of construction and their efficiency, and because the process of cleansing is so thorough that they stand for years without expense of operation. The claim is made that being simple, with no delicate parts to be broken or worn away by the action of water, and nothing but materials and workmanship of the highest grade, these filters possess unusual durability.

A copy of this catalog, which is fully illustrated, will be sent to architects upon request.

Better Plastering and Better Acoustics

Under the above title, Mr. Lawrence Hitchcock has written a treatise on interior plastering designed for the use of architects, owners and contractors. The work is published by Jackson-Remlinger Printing Co., Pittsburgh, Pennsylvania, and contains a strong recommendation for the use of hydrated lime plaster.

In the introduction it is stated that interior plastering is a subject which has not been given sufficient attention of late years, with the result that this particular branch of construction has been retrograding rather than advancing. The object of the book is to point out the factors which, in the opinion of the author, should be considered in plastering.

Old-fashioned lump lime plaster is described and various objections to it are enumerated. Gypsum hard wall plaster is also considered and certain characteristics are pointed out. It is stated that to overcome what were regarded as undesirable properties of the plasters in general use a great deal of research work was done, and as a result hydrated lime plaster was finally produced. It is claimed that in the manufacture of hydrated lime all the slaking and mechanical preparation of the lump lime,—work done in the past by the laborer at the building site,—is now finished at the manufacturing plant under the direction of experts and by the use of machinery which insures a uniform and thorough hydration of the lime, as well as the removal of all free lime and impurities. The elimination of these operations prevents, it is stated, the troubles that were met with in the use of lump lime on the site of the building operation.

The methods of mixing are given, characteristics of the materials are discussed, and the following advantages for hydrated lime plaster are set forth: First, that it is a sound deadener; this is given as the main advantage. The second advantage is, it seems, the fact that lime plaster does not harden within the short time that hard wall plaster does, and from this fact it is claimed that straighter walls and truer surfaces and angles can be secured. Other less important advantages are enumerated, having to do with the protection of metal lath; the prevention of buckling in wood lath; greater ease and less expense in decorating the hydrated lime plaster wall; economy in white coat; superior spreading qualities, etc.

The book contains a set of standard specifications for hydrated lime plaster, under practically all conditions encountered in ordinary work.

Stirling Tracing Cloth

A new tracing cloth marketed under the trade name of "Stirling" is being imported by the Defiance Manufacturing Company, 22 East 41st Street, New York City. It is claimed that this tracing cloth is of superlative merit, being unusually transparent, and requiring no powder to make it take ink. It is further stated that it will stand more erasing than is usual, tests having been made up to six erasures before reinking becomes impossible.

To architects interested in this new product a sample will be sent upon application.

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