The AMERICAN
ARCHITECT
AND BUILDING NEWS

Regular Edition

Vol. XCIV.

JULY 1, 1908

No 1607

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY.

ANNAPOLIS, Md. By ERNEST FLAGG, Architect

OLEST CHURCH ORGAN

EDITORIAL COMMENT


ILLUSTRATIONS:

New Buildings for the United States Naval Academy, Annapolis, Md. Part I. (12 pages and text cuts.)

THE THIRTY-NINTH STREET BUILDING

233-241 WEST THIRTY-NINTH STREET, NEW YORK
The Value of a good Tin Roof cannot be overestimated.

"Merchant's Old Method"

Made of Open Hearth Base.

Why encourage CHEAPNESS in the roof more than other parts of a building? The roof is just as important as the foundation and should last as long.

Write to us for facts.

MERCHANT & EVANS CO.

Successor to MERCHANT & CO., Inc.

PHILADELPHIA

ALPHABETICAL LIST OF ADVERTISERS

A
Alcan Cement
American Lead Pipe Co.
American Mason Safety Truss Co.
American Radiator Co. (e.o.w.)
American School of Correspondence
American System of Concrete Reinforcing (e.o.w.)
Art Metal Construction Co.
Arlington Wall & Supply Co. (e.o.w.)
Atlantic Terra Cotta Co.
Atlas Portland Cement Co.
B
Bedford Quarries Co., The
Berkner Mfg. Co.
Bird, P. W. (e.o.w.)
Burt Mfg. Co. (e.o.w.)
Burt Mfg. Co., A. W. (e.o.w.)
C
Cobert, Samuel, Inc.
Campbell, Walter M.
Cardinal Steel stair Co.
Carter White Load Co.
Carver Geo. P.
Chicago Bridge & Iron Works
Chicago Portland Cement Co.
Chicago Wire Cloakroom Co.
Coulson & Co., J. W. (e.o.w.)
Covert, The H. W.
Cox & Co.

D
Daviess Mfg. Co.
Dahlstrom Metallic Door Co.
Dawson Bros.
Denning Co., The
Dent Co., The
Dimitriou Bros.
Detroit Show Case Co. (e.o.w.)

E
Edison Portland Cement
Earthquake Mfg. Co.
Eastern Portland Cement Co.
Eaton Bros.
Edison Portland Cement Co.
Elevator Supply and Repair Co. (e.o.w.)
Estabrook's Sons, R.
Expanded Metal and Corrugated Bar Co. (e.o.w.)
F
Faber, A. W. (e.o.w.)
Faber, A. W., Robert C.
French & Co., Samuel H.
Frink, J. P.

G
Gabriel Concrete Reinforcement (e.o.w.)
General Fireproofing Co. (e.o.w.)
Globe Ventilator Co.
Griffin & Co.
Gurney Heater Mfg. Co.

H
Hays, Geo.
Higgins & Co., Chas. M. (e.o.w.)
Holiland Furniture Co.
Hunt & Co., Robert W.
Hunt Metal Corner Co. (e.o.w.)
Hyde Murphy Co.

I
International Moulding Co. (e.o.w.)

J
Jenkins Bros.
John-Marlville Co., H. W.

K
Kawneer Mfg. Co. (e.o.w.)
Keough & Mattison Co.
Kennedy Boiler Co.
Kenneth Water Supply Co.

L
Leather Hunter (e.o.w.)
Leavitt Mfg. Co.

M
Mannertt Cement Mfg. Co.
Merchant & Evans Co. (e.o.w.)
Monument Pottery Co.
Mullins Co. The W. H. (e.o.w.)
Murdoch Slag & Co.

N
National Fireproofing Co.
National Lead Co.
National Regulator Co.
National Asphalt Co.
Neuchatel Asphalt Co.

O
Okonite Co. (Ltd.) (e.o.w.)

P
Peerless Rubber Mfg. Co. (e.o.w.)

R
Raymond Concrete Pipe Co.

S
Sammus Corrugated Works (e.o.w.)
Sandusky Mfg. Co.
Sandusky Portland Cement Co.
Schubert, Frank H.
Schubert & Sons, The

T
Taylor, J. W.
Thom Co., J. S. (e.o.w.)
Thorn Fireproof Door Co.
Triumph Ice Machine Co. (e.o.w.)
Truscon Steam Steel Co.

U
U. S. Noteworthy Sign Co.
U. S. Mail Chute Equipment Co.

V
Vaile & Young

W
Warner Bros.
Washington University

Y
Yeomans Bros.
Sure Boiler Ratings.

The problem of specifying heating equipment which will supply the building without burdening it with too large a boiler and needless radiation nor depriving it of adequate heating facilities is best met by specifying Boilers whose ratings are known to be exact.
"The Best Is the Cheapest"

This applies to Old Hoosier Stone. It is by far the best Oolitic Limestone on the market, which has been proven by the fact that it has been used in more high-class buildings throughout the country than any other Bedford Stone.

Specify Old Hoosier Stone from The Hoosier Quarries of THE BEDFORD QUARRIES COMPANY.

The price of "OLD HOOSIER" is non-fluctuating.

THE BEDFORD QUARRIES COMPANY

204 Dearborn Street
Chicago, Ill.

1 Madison Avenue
New York, N.Y.

818 Euclid Avenue
Cleveland, Ohio
DETOUR “FENESTRA”
Wrought Steel Window Sash

A Fireproof Window

A Strong Window

An Inexpensive Window

FOR

FACTORIES
POWER HOUSES
WAREHOUSES
PUBLIC BUILDINGS
INSTITUTIONS
JAILS, etc., etc., etc.

DETROIT “FENESTRA” SASH is manufactured from special rolled steel section, and is preferable to any other metal sash on the market for the certain class of substantial construction heretofore mentioned. Its cost is much below that of other metal sash, while its strength and durability is readily appreciated.

It can be made to fit any opening, large or small, and to withstand wind pressure up to 16 x 20 without reinforcement. Expensive frames are done away with, and more light area is obtained from the given opening.

The sash with all its strength has a light and slighty appearance; it can be divided into various sizes of panes, from the smallest to the large paned, say 20 x 30 inches, if desirable.

In basement windows of city houses the sash becomes a steel grating, giving protection from thieves and burglars, and nothing to interfere with washing.

For use in institutions and insane asylums, its combined value as a grating without the apparent visible effect, can be at once understood.

In paper mills, soda ash works and other similar plants where chemical action or dampness destroys sheet metal and wood, the Detroit Fenestra Sash are being used to replace.

We invite correspondence, and if encouraged will gladly send an expert to consult. Write to us to-day.

DETROIT STEEL PRODUCTS COMPANY
DETROIT, MICHIGAN
PEERLESS RUBBER TILING

CUSHION BACK

The Most Durable and Economical Floor Covering Made

BEAUTIFUL DESIGNS  EFFECTIVE COLORINGS

Noiseless, Waterproof and Non-absorbent

Peerless Rubber Tiling is made in large continuous sheets, and is impregnable to dirt and moisture.

It is sanitary, beautiful and a durable rubber floor covering.

Beware of cheap substitutions and imitations purporting to be sheet rubber tiling.

SEND FOR OUR CATALOGUE ILLUSTRATED IN COLORS.

PRICES ON APPLICATION.

MANUFACTURED EXCLUSIVELY BY

The Peerless Rubber Manufacturing Company

16 Warren Street and 88 Chambers Street

NEW YORK
Not an Imitation—Not a Substitute

Since the Kewanee System of Water Supply has attained an enviable reputation and has established itself as an absolute success, imitations have appeared upon the market.

Whenever you have a water supply problem to solve, remember this:

**THE KEWANEE SYSTEM OF WATER SUPPLY**

is *not an imitation*—is *not a substitute*. It is the *original* water supply system which involves the use of *air pressure* instead of gravity pressure.

There are over 8,000 Kewanee Systems in operation, supplying water for country and suburban homes, public and private institutions, clubs, schools, apartment buildings, villages, etc.

We make no charge for our specifications and estimates. Our experience in the water supply line and the technical knowledge of our engineers are at your service. We protect you with a guarantee of satisfactory results.

Avoid cheap imitations. Specify genuine Kewanee Systems to be furnished by us. Specify Kewanee Pneumatic Tanks, bearing our blue label trade-mark. Look for our name on all pumping machinery.

Write for our catalog and let us tell you how we cooperate with architects. Mention the American Architect.

**Kewanee Water Supply Company**

KEWANEE, ILL.

1566 Hudson Terminal Building, 50 Church St., New York
710 Diamond Bank Building, Pittsburg
820 Marquette Building, Chicago
When Writing Painting Specifications

"What brand of White Lead shall I specify in my painting contracts to be assured of purity of material and excellence of manufacture?"

That's a question which no architect ever asks himself if he has become familiar with National Lead Company brands.

The brands made by National Lead Company are of uniform superiority in every respect. No matter where you find them, if the Dutch Boy Painter is on the side of the keg full confidence may be placed in the White Lead and in the results it will give.

NATIONAL LEAD COMPANY
Largest Manufacturers of White Lead in the World

New York, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis
Philadelphia (John T. Lewis & Bros. Co.)

Pittsburgh (National Lead and Oil Co.)

BROWN BROS.
MFG. CO.

ESTABLISHED 1860

22nd Street and Campbell Ave.
CHICAGO

Ornamental Iron
and
Bronze
RAYMOND CONCRETE PILES are PERMANENT

The permanence of any superstructure is dependent upon the permanence of its foundation. Once the bearing value of the superstructure becomes impaired the superstructure is correspondingly weakened.

Four factors cause piling to deviate from specifications: rot from recession of water level, the attack of boring animals, distortion from earth pressure, and brooming and splitting from overdriving.

None of these can affect Raymond concrete piles. Moisture cannot injure the concrete, nor can boring animals attack it. A permanent sheet steel shell makes distortion from earth pressure an impossibility and insures a contour in exact accord with specifications. Since the shell is placed by a collapsible steel core before the pile is made there is no driving on the concrete.

NO RAYMOND CONCRETE PILE EVER FAILED TO BEAR THE LOAD FOR WHICH IT WAS DESIGNED

THE RAYMOND HANDBOOK ON CONCRETE PILES MAY BE HAD FOR THE ASKING.
Security
Mail Chutes

We make only one mail chute—“Security”—the best—we have no second grade, no poorer device to sell to those who will not buy the best.

While there might be a larger profit to us in selling a second grade chute, we value our reputation too highly to handle anything that we cannot give our unqualified endorsement.

The Security Mail Chute is the best that brains has yet devised and money and skilled labor can build.

SEND FOR OUR NEW CATALOG
U. S. Mail Chute Equipment Co.
ST. LOUIS, MO.

ECONOMY

For the Home
For Business
or other smaller installations, blocks, churches, halls, flats, the greatest satisfaction is schools, dormitories, or other derived from using that old large buildings, nothing is as pioneer.

It never has been equaled for greatest comfort-giver built.

ARCHITECTS MAKE MISTAKES

But never when the name Kewanee is in their specifications.

Good people want good goods. Give them the best—that’s Kewanee.

Kewanee
BOILERS
Manufactured Exclusively by
Kewanee Boiler Company
Kewanee, Ill.

SAFETY

DURABILITY

EASE OF MANAGEMENT
Decreasing Fireproofing Cost

Are you familiar with the new methods of using Terra Cotta Hollow Tile in connection with re-enforced concrete structural members?

Are you familiar with the economy, efficiency and strength of long span Hollow Tile Floors (re-enforced) used in spans up to 25 feet?

Are you aware of the greatly decreased cost of fireproof construction under these methods?

How can you be sure of the best fire-proof construction, or the lowest cost, or either, unless you figure with the largest fireproofing organization in the world?

Send us your plans to figure.
Estimates cheerfully made.

National Fire Proofing Company
Manufacturers of Terra Cotta Hollow Tile
Contractors for Construction of Fireproof Buildings
The largest firm in the world devoted exclusively to the business of fireproof construction.
Capital Twelve and one-half Million Dollars.

PITTSBURG, Fulton Building
PHILADELPHIA, Tread Title Building
WASHINGTON, D. C., Colorado Building
MINNEAPOLIS, MINN., Lumber Ex.
BOSTON, Old South Building
ST. LOUIS, MO.
LONDON, ENG., 26 Chancery Lane

Twenty-six factories throughout the United States.
The American Architect and Building News.

We make a specialty of the design and construction of steel tanks for fire protection and general service. Our elevated tanks give a positive direct supply of water under pressure which is independent of the operation of any machinery to maintain the pressure until the tank is entirely empty.

The structure illustrated is built entirely of steel, including the ornamental features. Erected at Roslyn, L.I., on the estate of Mr. Benjamin Stern. Capacity 50,000 gallons, height 84 feet. Schickel & Ditmars, Architects.

CHICAGO BRIDGE AND IRON WORKS
105th and Throop Streets, CHICAGO, ILL.

COMPLETE SETS
OF
Les Grands Prix de Rome D'Architecture
Ecole Nationale des Beaux-Arts
1850-1907

The complete work consisting of 547 plates, reproduces the first, second and third prize drawings of the Ecole des Beaux-Arts, Paris, for the past 57 years.

SIZE
In 5 portfolios, $35.00
Bound in half morocco, $48.00
Plates hinged in bound set.

M. A. VINSON
Importers-Ttnder
Books on Architecture :: Decoration
Illustration :: Gardens
205 Caxton Building
Cleveland, Ohio

NO CLEARER indication of the merit of Neponset Waterproof Sheathing Paper could be required than the character of the buildings upon which it has been applied. We will be glad to submit specific information.

The now widely recognized fact that NEPONSET SHEATHING PAPER Keeps Houses Warm is due both to the quality of the material and the educational campaign so successfully conducted by this company.

In asserting that Neponset is worthy of your unqualified recommendation to your clients, we do so in the positive knowledge that it will be found more than up to every requirement to which it will be subjected.

Send for samples
F. W. BIRD & SON
East Walpole, Mass.
ESTABLISHED 1817

[Diagram of Neponset Sheathing Paper]

[Blurb about Neponset Sheathing Paper]

[Contact information for F. W. Bird & Son]
CORRUGATED BARS

are rolled from

ORIGINAL BILLETS

Open hearth or Bessemer Stock,
Medium or high carbon steel.

WE ALSO FURNISH RE-ROLLED BARS OF HIGH CARBON BESSEMER STEEL.

EXPANDED METAL and CORRUGATED BAR CO.
FRISCO BLDG.
ST. LOUIS.

WRITE FOR OUR BULLETINS ON DESIGNING METHODS.

THE average architect or owner would on no account overlook the importance of just the right apparatus for the proper provision of Heat and Air, but will frequently subject the occupants in parts of the building in question to the use of detrimental artificial light, when if LUXFER PRISMS were provided, their work could be done in real daylight.

The increased renting value of premises so equipped is obvious.

AMERICAN LUXFER PRISM COMPANY
Heyworth Building, Chicago

BRANCH OFFICES

NEW YORK, 507 W. Broadway
BOSTON, 40 Federal St.
SAN FRANCISCO, 225 Oak St.
CLEVELAND, 1003 Garfield Bldg.
BALTIMORE, 32 Builders Exchange.

KANSAS CITY, 908 N. Y., Life Bldg.
ST. PAUL, 318 Ryerson Bldg.
PHILADELPHIA, 609 Chestnut St.
CINCINNATI, 31 Thoms Bldg.

NEW ORLEANS, 904 Hennen Bldg.
MILWAUKEE, 1,743 Railway Exchange.
INDIANAPOLIS, 345 N. Washington St.
PITTSBURG, 1037 Fulton Bldg.
ST. LOUIS, 1003 Carleton Bldg.
Proved Best by Every Test
and approved by the National Board of Fire Underwriters

Mullins Fireproof Window

is absolutely fireproof and actually does what no other window can do—it stands every test. Ask for an estimate or write for our convincing catalogue.

The W. H. Mullins Co.
206 Franklin Street, Salem, Ohio.
We also make everything in architectural sheet metal work—statuary, skylights, wrought iron grilles, cornices, etc. 120-page catalog of stock designs on request.

IF YOU WISH THE MOST COMPLETE PLUMBING Catalogue ever issued, send us a copy of your letterhead at once

THE NEW 1908 CATALOGUE of L. Wolff Manufacturing Co. should be in every office

ESTABLISHED 1855

L. Wolff Manufacturing Co.
Manufacturers of Plumbing Goods Exclusively
The only complete line made by any one firm.
Showrooms, 91 Dearborn Street
CHICAGO
DENVER, COLO.

Plants of the L. Wolff Manufacturing Co., located at Chicago, Ill., and Trenton, N. J., occupying about 34 acres of floor space.
Mr. Architect:
The choice between correct and indifferent methods in Reinforced Concrete Construction rests with you.

Here are a few reasons why the Kahn System Method is the correct method.

The rigid connection of the shear members of the Kahn Trussed Bar puts this bar in a class by itself, superior to any other type of concrete reinforcement—

**Because**

1st It makes absolutely certain the correct placing of the shear resisting members and insures their remaining properly placed while concreting. (See "What Reinforced Concrete Is." Copy on request.)

2nd It gives greater strength to the reinforced concrete beam. The diagonals being inclined at an angle of 45 degrees, project well into the mass of the concrete, and the stresses in these diagonals are transferred directly into the main reinforcing bar. Note the Truss action! (See Tests on this point made at the University of Wisconsin—Bulletin No. 197.)

3rd It perfects the fireproof quality of Reinforced Concrete. (See "Dayton Fire Bulletin," copy of which will be sent on request.)

4th It costs less to place and saves on the total cost of materials. Each bar is a complete unit, especially prepared for its place, doing away with the handling of a large number of small pieces. Besides only 1/2 inches of concrete is necessary below the reinforcing steel instead of 3 inches as otherwise required. (Copy of "Comparative Costs" on request.)

The advantages of Reinforced Concrete are recognized, but to secure these advantages a scientifically correct type of reinforcing steel must be used under the direction of specialized experience. Our Engineering Department is at the service of every Architect in the working out of reinforced concrete construction problems and designs.

Every Architect should have a copy of "Kahn System Standards"—a practical Handbook on the Calculation and Application of Reinforced Concrete. We have a special offer which will interest you.

---

In addition to our products for reinforcing concrete we manufacture a full line of Rib-Lath, Hy-rib Shingling and Builders' Structural Specialties. Write for Catalog.

TRUSSED CONCRETE STEEL CO.
618 TRUSSED CONCRETE BUILDING.
DETOIT, MICHIGAN
Cabot's
Shingle Stains
The first made, first in quality and first in the favor of those who have used them. Scientifically balanced formulae, purest ingredients, no adulteration. The standard for 25 years.
Samples, Color-Chart and Catalogue sent on request

JENKINS BROS. RADIATOR VALVES
are made from the same patterns as our regular steam Globe and Angle Valves, contain the same improvements, and are strong, heavy, and durable. Hone made of a fine grade of new steam metal, the finished valves take a fine color when polished. Made in a variety of styles—[with or without unions] with brass or wood wheels; with lock shields and keys; and either plain, polished, or nickel plated.
Write for a copy of our 1907 catalogue
JENKINS BROS.
New York Boston Philadelphia Chicago London

ASPHALT
Floors, Roofs, Sidewalk and Carriage Ways
of Public Buildings, Hospitals, Warehouses, Stables, Cellars, etc., laid with
Val de Travers Rock Asphalt
Durable, Fireproof and Impervious. For estimates, and list of works executed, apply to
The Neuchatel Asphalt Co., Limited, 265 Broadway, New York

Clean Show Windows
In a store building are pre-eminently a necessity.
Kawneer System provides the only method of draining plate glass that is at once simple, inconspicuous and effective, in a word it is the "Quick Cleansing Kawneer"
Catalog Sent on Request
KAWNEER MFG. CO.
120 Factory St., Niles, Mich.
Branches in all principal cities.

The Gabriel System
OF CONCRETE REINFORCEMENT
has been used in all types of concrete construction and has conclusively demonstrated its superiority for
ADAPTABILITY
EFFICIENCY
ECONOMY.

Our designs are conservative, which accounts for the fact that we have had no failures.
WRITE FOR OUR DESIGNING TABLES
Gabriel Concrete Reinforcement Co.
1211 Penobscot Bldg., DETROIT, MICH.
The General Plan

The old City of Annapolis and the Naval Academy share between them, in about the proportion of three to two, a peninsula or tongue of land near the mouth of the Severn River. It would be hard to find a more agreeable location. In its way it is quite as beautiful as West Point is in its way, but the character of both land and water is entirely different in the two places.

One end of the Academy ground is open to the bay, and one side lies along the river, the opposite shore of which with its high banks of sienna and green, forms a charming point of view from under the old trees of the Campus. The other side of the Campus is bounded by the town. The yard forms an irregular quadrilateral about 2,000 feet wide by 4,000 feet long. Before the building operations were begun, the land was more in the shape of a triangle, but it has been squared up by reclaiming land on the river side (Fig. 2). In general the old buildings were arranged in rows parallel to the former outlines of the yard. Most of the officers' quarters formed a row along the town side. The Superintendent's house, marine barracks and other quarters formed a row on the bay side, and the boathouse, shops, power house and other buildings an irregular row on the river side. The remaining end was occupied by the main quarters or new quarters, as it was called, and the Armory.

The Parade Ground was on made land towards the bay beyond the Superintendent's quarters, near old Fort Severn, the latter a small round structure which stood on the point when it was first built, but which is now well inland owing to the reclamation of land under water which has been going on for years. This old fort is the father of the Academy, so to speak; many of the old buildings belonged to it. In 1845, when the Academy was founded, it was located on this reservation and the old buildings of the fort were turned over to the navy department.

From what has been said, it will be seen that the old buildings were arranged roughly in the form of a quadrilateral. They were built from time to time as they were needed, wherever there was a vacant space, with the result that many of them were very inconveniently
placed. For instance, the Armory was at one end of the yard, and the Parade Ground at the other. So there was great loss of time in marching and dragging guns back and forth a half a mile by devious paths at every drill. The midshipmen’s quarters was also most inconveniently placed. It is necessary for the men to change their clothes several times every day for the different drills and exercises, each change necessitating a long walk to and from the quarters.

The old buildings were for the most part poorly built and none had any artistic interest. The old library had formerly been a fine Colonial house, but it had been changed out of all semblance to its former self. Old Fort Severn, which is interesting as having been the made land on the side towards the bay was admirably placed and could easily be enlarged by the reclaiming of more land. The officers’ houses were well placed along the town side overlooking the green, and served as a cause of the selection of this spot for the Academy, was years ago converted into a gymnasium. It is proposed to restore it to its original condition, and preserve it as a relic of the past.

In designing the new Academy, it seemed to me that the proper location for the different parts was self-evident, being fixed by the existing conditions and the uses to which the buildings were to be put.

The great central quadrangle with its old trees should certainly be preserved. The Parade Ground on the low
screen to the town. The boathouse was also well located on the river bank. Before I had been in the place a day, I sketched a plan for the general arrangement of the buildings which has been practically adhered to ever since. This plan provided buildings on three sides of the old Campus, leaving the fourth side, towards the river, open.

Three gates, at the ends of abutting streets, give admission to the grounds from the town, the central one of which at the end of Maryland Avenue is the most important. As the land is highest on the town side, and slopes down to the water, one enters on a gentle incline. The highest point on the property, some thirty feet above the water, is to the right of the Maryland Avenue gate, and here seemed the best place for the Chapel, which from its height would be the dominating feature of the design. In this position it would face the center long row of officers' houses extending from the bay on the one hand to the creek at the upper end, a distance of about three-quarters of a mile. Up to the present time the row is broken into two sections by two city blocks which project into the grounds (see Fig. 2), but in time these will doubtless be acquired by the Government, and the missing link supplied. When this is done, the row of officers' quarters will be one of the most effective features of the plan.

I have said that the Chapel facing the river on the town side of the Campus has on one side the Superintendent's house, and on the other side the Administration Building. These three buildings form one of the main
groups (see Fig. 3). At a considerable distance back of them, the long line of officers’ houses, drawn up like a battalion on parade, will form the second main group. At right angles to these groups, with its center also facing the center of the Campus, stands the third great group, also consisting of three buildings; the central one of which, Bancroft Hall, or the midshipmen’s quarters, is the largest of all the buildings. To its right is the Gymnasium, and to the left the Armory, and all three are connected by colonnades (see Fig. 4 and Plate 18). These buildings form a gigantic screen between the Campus and the Parade Ground, as shown in Fig. 2. The difference in grade between the higher land of the Campus and the reclaimed land which forms the Parade Ground on the bay side is compensated for by a U-shaped wall about eighteen feet high, which extends from the Armory to the Gymnasium, a distance of 1,054 feet. By this arrangement the quarters are brought into convenient proximity to both the Gymnasium and the Armory, and the Armory is conveniently placed with respect to the Parade Ground upon which one end of it abuts. The Gymnasium building, which also contains the Department of Seamanship, corresponds to the Armory in size and appearance. Each are 500 feet long by something over 100 feet wide. They are symmetrically placed with respect to the midshipmen’s quarters, or Bancroft Hall, as it is called, and as I have said, are connected with it by colonnades.

The third side of the Campus, the one opposite to the Chapel, is entirely open to the river. On the fourth side stands what is called the Academic Group, but which is one building in three parts, built around three sides of a court (see Fig. 11). The central part at the back of the court, which latter is open on the side toward the Campus, contains the Library and Auditorium. The left wing houses the several academic departments, and is entirely devoted to class rooms. The right wing contains the Department of Physics and Chemistry. Directly back of this building or group stands the Marine Engineering building with its annex. These two buildings are rectangular in plan, the larger being 267x175 and the smaller being 70 feet wide by 125 feet long. The Academic Group and the Marine Engineering building with its annex may be taken together as forming the fourth great group of buildings.

There remains only one other group. This stands on what is called the Power House pier. It consists of the power house and two shop and storage buildings.

A basin on the river side of the Campus is enclosed on one side by the Power House pier. It is 1,000 feet long and 240 feet wide. At one end of the basin the Power House stands on its central longitudinal axis, and at the other end the Seamanship and Gymnasium building occupy a corresponding place. On the river side two short piers project from either end and partly enclose it. The original plan calls for stone lighthouses or beacons on the ends of these piers, as shown in Fig. 1, but up to the present time they have not been built. Neither has anything been done on the low amphitheatre shown in the picture. I hope that means will be provided to carry out these features, upon which so much of the beauty of the plan depends.

To my mind it is much to be regretted that, owing to what seem to me false notions of economy, the sea wall, which was to have been of granite, has been carried out in cement, except on the Power House pier, and the projecting piece of wall shown in the illustration at the centre of the basin on the Campus side has been omitted. A little money has been saved and perhaps a little convenience gained, but the beauty of the plan has been sacrificed. I hope that sometime, at least a granite coping may be substituted for the unsightly cement, and that a dignified and suitable landing stage may be placed so as to form a central feature on the land side of the basin.

Mention has been made of the Campus, with its old trees and shaded paths, surrounded on three sides by great groups of buildings, and on the remaining side open to the water; also of the Parade Ground, screened from the Campus by Bancroft Hall and its flanking buildings, but there is still another field to mention of almost equal extent with the Campus and the Parade Ground. This
PLATE I—THE CHAPEL, FROM THE CAMPUS.

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOLIS, MD.

Ernest Flagg, Architect


Copyright, 1908, by the Swetland Publishing Co.
PLATE 4—SECTIONS OF CHAPEL.

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOLIS, MD.

Ernest Flagg, Architect


Volume XCIV., Number 169.
July 1, 1908.

Copyright, 1908, by the Swetland Publishing Co.
PLATE 5—SUPERINTENDENT'S QUARTERS.

PLATE 6—ADMINISTRATION BUILDING.

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOLIS, MD.
Ernest Flagg, Architect


Copyright, 1908, by the Swetland Publishing Co.

Volume XCIV., Number 1697.
July 1, 1908.
NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOLES, MD.

PLATE 7—THE LIBRARY.

Architect: Robert P. Hubert.

Copyright, 1888, by the Rockland Publishing Co.
Plate 8—Stairway, Library Building.

New Buildings for the United States Naval Academy, Annapolis, Md.

Ernest Flagg, Architect

The American Architect and Building News.
Regular Edition.

Copyright, 1908, by theSweetland Publishing Co.
PLATE 16—VIEW LOOKING TOWARD ARMY, ALONG TERRACE ON PARADE GROUND FRONT, BANCROFT HALL.

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOolis, MD.

Ernest Flagg, Architect

The American Architect and Building News.
Regular Edition.

Volume XCIV., Number 1697.
July 1, 1908.

Copyright, 1908, by the Swetland Publishing Co.
PLATE 17—CENTRAL PAVILION, BANCROFT HALL—PARADE GROUND FRONT.

PLATE 18—COLONNADE CONNECTING BANCROFT HALL AND ARMORY FROM TERRACE.

NEW BUILDINGS FOR THE UNITED STATES NAVAL ACADEMY, ANNAPOLIS, MD.

Ernest Flagg, Architect


Copyright, 1908, by the Sweetland Publishing Co.
field or green, like the Campus, is surrounded on three sides by buildings, while the third side is open to the water. On one side stands the row of officers’ quarters, which eventually is to extend from water to water. Another row of officers’ quarters at right angles to this encloses the second side, while the third side is separated from the Campus by what I have designated as the fourth great group of buildings. For some years, while the work of rebuilding has been in progress, this green has done duty as the Parade Ground of the Academy, but this is probably the last year that will see it used for that purpose, and hereafter it will probably form the playground for the children whose parents occupy the officers’ quarters, which enclose it on two sides.

Everything that has so far been said relates to the most important part of the Academy grounds, but this is by no means the largest part. The Government owns land both on the other side of the river and the other side of the creek, which bounds the part already described, on the northwest.

On high wooded land beyond the creek on the river side is the Cemetery. And beyond the Cemetery, the Hospital. Back from the river is the Marine Barracks, with its Parade Ground.

THE CHAPEL

The Chapel, a domical building, stands opposite the centre of the Campus on the side towards the town on the highest land within the enclosure, at an elevation of about thirty feet above the water. Its plan is in the form of a Greek cross. Its width and depth are equal, 116 feet inside and 128 feet outside. The rotunda measures 84 feet across. Like many other of the later buildings, its appearance has been very greatly hurt by what seems to me false economy, or the desire to reduce cost at the expense of the quality of the building material used. I have always advocated a reduction in quantity rather than in quality, but without success.

When the original designs for all the buildings were approved by the Secretary, $400,000 was allotted to this building. Between that time and the date of its erection the cost of labor and material had advanced fully 30 per cent., and the size of the school had increased so greatly that it became necessary to increase the seating capacity by 25 per cent. Yet the amount allowed for its erection remained constant at $400,000. It may be asked under these circumstances why the design was not recast in a lower key. Unfortunately this could not well be done. The Chapel was not only to be seen in connection with the earlier buildings, which had been built of granite with a certain degree of richness, but it was, from its location, to be the dominating feature of the whole group. To keep within the limits fixed and at the same time comply with these requirements I was put to my wits’ ends to reduce the cost. The massive walls of the original plan were abandoned for a skeleton framework of concrete with a veneer of masonry.* The granite of the original design gave place to brick, except for the moulded surfaces, and even here terra cotta was used wherever it could be used to save granite. Thus the bed mouldings and mutules of the main cornice are of terra cotta in clever imitation of granite. The gilt copper covering of the dome was also abandoned for terra cotta, while the interior, which I had hoped to have built of solid limestone like the great rooms in Bancroft Hall, was made of plaster. Even down to the most minute details economy had to be practiced at the expense of the monumental character of the design. The organ case is of plaster; the lamps which were to have stood at either side of the main entrance were omitted, and so on. Some may think that the United States has saved one or two hundred thousand dollars by this parsimony, but I am not one of them. True, the money necessary to make the Chapel what it ought to have been has not been spent, but I don’t think it has been saved, neither do I think that many people will greatly applaud the zeal of those who skimmed a work of this kind for the supposed benefit of a nation.

*Fig. 6 shows this interesting construction. The beams and posts, which from their delicacy seem to be of wood, are in reality of reinforced concrete.
which is rich enough to have the best and quite willing to pay for it.

I have always been a great admirer of John Paul Jones, and when I made the first rough sketch for the rebuilding of the Academy in 1896, I had in mind that the Chapel should be his burial place, if his remains could be found. In 1900, when I met Mr. Long, then Secretary of the Navy, on the spot, I suggested to him the advisability of using the crypt under the Chapel, which I had provided in the plans for that purpose, and that a search be made in Paris for the body. He seemed to like the idea. At various times afterwards I wrote to the Department, urging that the search be made. To one of these letters I received a reply that General Porter was to institute the work, and I wrote to the Secretary, asking if it was so, but he dashed my hopes of a share in the honor by saying I was in no way responsible for the movement; be that as it may, it is of interest to note that the crypt of the Chapel was designed from the start with the idea that it might serve as the final resting place for the remains of the father of the American Navy. Congress has not yet appropriated the necessary money to finish the crypt for this purpose, but it will undoubtedly do so, and I hope to live to see its completion, as shown in Fig. 7, with the sarcophagus in its midst inscribed with Jones' own words: "Men count for more than guns in the rating of ships."

Plate 1 is a view of the Chapel from the center of the Campus. The building stands on a low terrace. The granite pedestals at either side of the broad flight of steps which lead to it are to be surmounted by trophies consisting of beautiful bronze guns of seventeenth century French workmanship, and anchors with chain. The central frontispiece is composed of Doric columns and piers sixty feet high supporting an entablature and semicircular pediment. The columns and piers are ornamented with dolphin heads and festoons. Below the main architrave is a large tablet of Levanto marble, which was intended to contain a suitable inscription. The main doorway, which has richly moulded architrave and cornice, is twenty-three feet high and ten feet wide. This doorway is to contain a monumental pair of bronze doors, the gift of Col. R. M. Thompson, in memory of the Class of 1896. Miss Evelyn Longman was chosen to design the doors as the result of a competition in which thirty-three designs were submitted.

This prize winning model was shown in The American Architect for April 21, 1906, No. 1582, Miss Longman has received great praise for this work, and she is certainly richly entitled to all she has had. These doors will be one of the chief ornaments of the place. Above the pediments the frontispiece is crowned by trophies of arms and armor.

The transept ends are of the same size as the end of the nave, but their treatment is different, each one contains a large semicircular headed window filled with delicate tracery in limestone.

The drum of the dome rests on a base of circular steps of granite. It contains a frieze of twenty-four round headed windows, separated by Doric piers. The entablature has a cresting ornamented with blocks and festoons of cable. The dome covering is of terra cotta divided into eight great panels with trophies in relief.

The lantern, also of terra cotta, is surmounted by an obelisk and has a balcony with a balustrade at its base.

The whole interior is finished in imitation Caen stone. The wall surfaces and vaults are decorated with panels which were intended to receive decorations in fresco.

The monumental window of the chancel, shown in Plate 2, contains stained glass erected by the Class of 1896, as a memorial to Admiral Porter. The altar table is of richly sculptured cherry. The slab is supported by figures representing the four beasts of the Apocalypse.

A low gallery or balcony supported by rich corbels extends around the interior except at the chancel end; it has a handsome balustrade of wrought iron. The organ, Plate 3, stands on a base formed by the entrance vestibule.

The piers between the windows of the drum of the dome have figures built against them representing the different races of men. The great vault of the dome...
is richly ornamented with spiral caissons in the center of each of which is a light. This vault is at a considerable distance below the outer covering; both are built of concrete. The outer shell has a thickness of six inches at the base and four inches at the top which is only about half the thickness in proportion to its size that an egg shell is to the egg, but its strength is ample to carry the fifty-ton lantern at its apex.

**Officers' Quarters and Administration Building**

The administration building and the Superintendent's quarters occupy buildings of similar size flanking the Chapel (see Fig. 3). They are each sixty-two feet wide and fifty-eight feet deep, and have three stories and a basement. The Administration Building shown in Plate 6 contains the Superintendent's office, the Academic board room and various other offices of the Administration.

The Superintendent's quarters has two principal entrances, one for the ordinary use of the family giving upon the terrace (Plate 5), and another entrance, for use at receptions and other social functions, on a lower level preceded by a courtyard seventy feet wide and one hundred feet deep, entered from Governor Street. This court was intended to be furnished with a high wrought iron grille and gates, but these were omitted to reduce the cost.

**The Armory and Boat House**

These are twin buildings, each 425 feet long and 110 feet wide. They flank Bancroft Hall (Fig. 4) and are connected with it by colonnades.

Plate 15 is a view of the Boat House taken from the nearest the bay.

Mr. Flagg's article will be concluded in our next issue with the description and illustration of the Academic and Bancroft Hall groups.

---

**Oldest Church Organ**

**FOUND ON ISLAND OF GOTHLAND, AND IN EXCELLENT STATE OF PRESERVATION**

In the Baltic Sea, forty miles from the mainland, lies the Swedish Island of Gothland, a mecca for students of early Gothic architecture. In Visby alone, the chief town of the island, with its population of 8,000 souls, may be studied what remains of no less than ten churches, some of which date from the eleventh and twelfth centuries. The oldest of them is the Church of the Holy Ghost, completed about 1046.

Professor Hemmaberg, director in a German Music School, and especially interested in the study of medieval organs, visited fifty-nine churches in Gothland, and in a little village called Sundre came upon the remnant of what is unquestionably the oldest known organ in existence. The case alone has survived the fret of seven centuries, the holes for pedals and manuals are placed as in modern instruments, and inside one can see the chamber for the bellows and judge of their action; the exterior is adorned with paintings dating from about 1240.

When this ancient instrument could no longer serve its original purpose it was used as a sacristy, and for the safeguard of holy vessels and vestments was kept in careful repair, hence its excellent preservation to our day.—*Youth's Companion.*
THE almost total lack of activity and the nearly equal lack of definite plan to meet the new traffic conditions which will inevitably develop in Manhattan when the new Brooklyn subways, the Hudson tunnels, the new East River bridges, the Belmont and Pennsylvania tunnels are completed and put in operation is quite incomprehensible. Of course the questions involved are intricate and important and require much thought and consideration, but they are not new, and the progress which has been made toward their solution, so far as the public is aware, is surprisingly small. A great deal has been suggested but very little actually accomplished toward making the streets and avenues conform to the new conditions which are almost upon us. The spectacle of bridges completed without approaches or any adequate means for utilization will hardly be creditable to the city, especially in view of the time that has elapsed since their construction was assured and their locations fixed.

THERE would seem that the making over or adaptation, which must necessarily take place in many sections of the city in order to meet the new conditions, offers unusual opportunities for the development of much needed civic centers. If properly planned, civic centers located at points of congestion could not only be eventually beautified and made of great aesthetic value, but in the meantime would unquestionably add much to the comfort of the public. Their adoption would seem to go far toward precluding the possibility of such intolerable conditions of overcrowding as now exist in various sections where many lines of travel converge. The desirability, almost necessity, of beautifying the city in every way possible consistent with the means at hand is generally conceded. Practically all the larger cities of this country and many of the smaller ones are giving much attention to aesthetic considerations, and unless we are content to occupy an unenviable place among them we would do well to make the most of our obvious opportunities.
Lime Beton.

Someone has said that the average American is a slave to change. While this, of course, is not true, there is a tendency in some quarters to overlook some mighty good things that other countries use with great success. A case in point is concrete. One hardly ever, nowadays, sees anything going into a batch of concrete, no matter for what use it is to be put, but Portland cement, broken stone or gravel, or both, and sand. We seem to have overlooked entirely the fact that, for some purposes, broken brick is an excellent substitute for broken stone or gravel, and good, well-burned lime for cement.

Lime, or lime beton as the French call it, has been in longer and more general use than cement concretes. It was a first-class material when made with ordinary quicklime, and since hydraulic lime has been used it is better. It is a much cheaper composition than cement concrete, easier to work, and, if the initial load be not too great, it is for many uses just as good. A good lime beton can be obtained by mixing mortar, stones or gravel, or cinders, mortar and good-sized stones, which makes the best composition. Such a composition is very popular in France. Probably one-half of the houses in Paris have been built of this material, and thousands of the older buildings, many hundreds of years old, are held together with ordinary lime. Walls built of quicklime beton can be laid very slowly, but with hydraulic lime beton they can be erected as fast as the masons can work. The solidity of lime beton construction is shown by the seawalls and docks in Paris.

The form, of course, is the same as for cement concrete, and the beton is usually placed in eight to twelve-inch layers and rammed. The surface is scratched and treated with a wash of thin mortar or grout before putting on the next layer.

In both France and Germany a light-weight beton is made of cinders. Buildings several stories high have been built at 1 1/2 pounds per cubic foot as granite.

Lime is weighed out to the cubic unit of sand, and the two dry-mixed until thoroughly incorporated. Water is added slowly with a sprinker, and the plastic consistency tested by forming a ball with the hands, which should exude a slight moisture, and being laid aside should neither flatten nor crack open. Stones or other cheap material are mixed with the mortar, thus constituting the beton. Cinder, or both, and sand are often substituted for stones in ordinary house and wall work. If broken stone is used, it is broken to from 3/4 inch to 2/3 inches across. The proportions are usually two parts of stone to one part mortar for work under water; in air and above ground the proportion of stone may be increased.

The form, of course, is the same as for cement concrete, and the beton is usually placed in eight to twelve-inch layers and rammed. The surface is scratched and treated with a wash of thin mortar or grout before putting on the next layer.

In both France and Germany a light-weight beton is made of cinders. Buildings several stories high of this material are common, but when they exceed one story in height they are reinforced with the usual steel rods. Several very large factory buildings have been built at 1 1/2 pounds per cubic foot as concrete.

Striking economies are effected in France by the free use of cheap local material, whatever it might be, and by the equally free use of lime where cement would probably be used in the United States—J. W. Moultrie in the Scientific American.

OLDEST STATUE IN THE WORLD

Proofs of the oldest civilization known to archaeology have been discovered by Dr. Edgar J. Banks among the ruins of Bis-naya, in Mesopotamia, a week's journey to the south of Bagdad. The conclusions of the explorer are that the remains unearthed have an antiquity of not less than ten thousand years.

A white marble statue was unearthed at the base of the temple to which it was identified as the effigy of the Sumerian King David or David, the pre-Semitic ruler who antedated his Hebrew namesake by 3,500 years. This is the oldest statue in the world, being of the period of Babylonia's highest civilization (according to Dr. Banks), about 4,500 B.C. The inscription on it gives the names of the buried city as Ummun, and of the temple, also the oldest yet discovered, as Emach. British Stone Trade Journal.

CURRENT NEWS SECTION

LIME BETON.

COURT RULES THAT AN ARCHITECT MAY DUPLICATE HIS PLANS TO DIFFERENT CLIENTS

The St. Louis Architect and Engineer reports the following interesting case:

"Are the plans for a country house the sole property of the man who pays an architect to draft them? This is the question which was decided by the Marion County Court at the instigation of Frank D. Madison, a well-known attorney and clubman of San Francisco. The defendant in the case is Edgar Mathews, equally well known as an architect and clubman. The other defendants are Mr. and Mrs. De Courlicux of San Rafael and their contractor.

"About two years ago Madison decided to build and he engaged Mathews to draw the plans for a house, which was to be unique and totally unlike any of its neighbors. Later Madison's brother-in-law decided to build near by, and the attorney was surprised to learn that the plans for his long cherished residence had been duplicated by Mathews for his relative. Madison protested and Mathews consented to draw up some new plans. Later the brother-in-law died and his proposed residence was never built.

"When Madison's home was almost completed De Courlicux bought a lot two doors from him and sought and gained permission to inspect the unusual house of his neighbor. The result was the preparation by Mathews for De Courlicux of similar plans for a house on the lot which the new comer has just acquired. Through neighbors Madison's wife heard this and she at once informed her husband, who entered suit without delay to have the persons interested restrained from erecting such a house.

"In the suit Madison maintained that most of the value of the home is due to its unique architecture, and in support of this assertion he has the testimony of two real estate dealers, G. D. Shearer and L. A. Lansell, who maintain that the striking features of the house greatly increase its material value. These witnesses asserted that a similar structure near it would materially lessen its price in the real estate market.

"Madison has also procured an affidavit signed by Architects Clinton Day, William Noyes, W. D. Bliss and Fred H. Meyer, charging that Mathews has been guilty of a breach of professional ethics in supplying the same plans to two residents of the same city.

"According to the plans submitted to the court by Madison, the only difference in the two houses is in the size of a gable and a dormer window."

The court ruled that the architect may duplicate his designs. The court in its decision held that an architect has a certain personality which he expresses in the buildings erected by him. To restrain this personality would be to deprive the architect of his means of earning a living and retard the progress of his architectural and artistic advancement.

BALTIMORE'S BUILDING CODE

The building code originally prepared by a commission of seven men, representing the main branches of Baltimore's building interests, has been passed by the City Council and gone before the Mayor for his signature.

Regulations for every branch of building construction in the city are provided in the code, which limits the height of fireproof buildings to 85 feet, and of fireproof structures to 175 feet. This limitation would preclude in the future the erection of buildings as high as the Baltimore and Ohio office building, which, by special ordinance, was allowed to go up to the height of 210 feet.

The code provides regulations for the building of amusement places, moving picture resorts, tenements, lodging-houses and electrical devices used in buildings. The ordinance establishing the code was first introduced last year, but died with the Council.
Roger Preservation of Architectural Relics.

The question of what to do with an old and monumental structure that has outlived its practical use, yet has an ever increasing architectural and ethnological value, is now being squarely met at Columbus, Ohio. The State-house, designed by Bultinck, stands with the White House and the Octagon House at Washington as an expression of our earliest architecture. It is more valuable, as it is the oldest public building west of the Alleghenies that remains to us without alteration, that was designed by a trained architect and is expressive of his time. It may be a question whether it is worth while to preserve our relics, and if commercial and artistic advancement does not demand that we wipe the slate clear at every centennial, and only preserve that which will aid the advancement of each. But if, on the contrary, we wish to preserve the best that our forefathers left us, then the State-house at Columbus should remain upon its site, a carefully preserved memorial to that advancement from small beginnings. It is ridiculous to talk about remodeling or adding to this building. It cannot be brought up to modern ideas of utility without wholly destroying just those features which make it valuable as an architectural relic. But Ohio owes it to herself and the country that this building should be preserved and its environment not encroached upon. This is an old question in Europe, and it is solved by finding another site for the necessary building that enlarged business demands, and a State library or museum installed in the old and therefore sacred relic of a departed generation. Let this be done in Ohio. In matters such as these cost should cut little figure, but from a point of view the cheapest thing is to either raise the old capital and construct a modern office building in its place, or select a new and adequate site for the new State capitol.—Western Architect.

Modem Tenement Is Constructed in Paris.

Another model tenement has been opened by the Société Philanthropique, says a Paris dispatch. There has been a constant progression in tenement architecture in Paris; so the new building is far in advance of its predecessors, from both utilitarian and hygienic standpoints.

This house presents a novelty in the fact that it is specially designed for small artisans who work at home. There are forty-eight flats in all, each of which is supplied with a specially designed workroom, in which there are not only gas and running water, but motor power as well. The minimum rent is a hundred dollars a year, and the maximum a hundred and fifty dollars. On the ground floor is a large covered playground. On each floor are shower baths, which tenants may use free of charge. Floors and walls are tiled; the staircases are in cement. All the rooms are high, light, and well ventilated.

The whole top of the house is taken up with a flat terrace, something in the style affected by New York architects. A part of this is laid out as a roof garden and the rest as an open-air laundry.

Power and light in the house are supplied by electricity. Economical ranges are installed, so that gas can be used for the cooking as cheaply as coal or other fuel. There has already been such a rush of tenants eager to occupy this model building that similar houses will be erected with all possible speed.—Exchange.

To Decorate the National Capitol.

It is a pleasure to note that the National Sculpture Society, whose splendid exhibition at Baltimore was fully described in the American Architect, has been officially recognized by the United States Government, which has asked it to pamele of its members who would be in a position to undertake a group for the pediment of the north wing of the Capitol building in Washington. This project never having been formally undertaken, the Library Committee of the House of Representatives, which has in it charge, is making every effort to see that the proposed group shall be one of highest artistic merit. The following sculptors were placed on the list: Paul W. Bartlett, H. A. Bitter, Robert Bowne, Richard Brookes, Charles H. Nichaux, Edward Adams, Albert Jaegers, Karl Bitter and Attilio Piccirilli.

Industrial Refrigerators.

A sanitary refrigerator, built on the most approved system of refrigerators, is claimed by the White Enamel Refrigerator Co., of St. Paul, Minn., with New York offices at 59 W. Forty-second Street.

Supporting these claims as well as others along the lines of best construction and artistic effect, this company issues an illustrated pamphlet of sixty pages, gotten out in colors, which may be had upon application.

Rubber Tiling.

Andrew Dail and Son, of Cleveland, Ohio, recently placed an order with the New York Belting and Packing Co., Ltd., for the installation of Interlocking rubber tiling in the Cuyahoga County Court-house, Cleveland, Ohio, for which Lehman and Schmidt are the architects, amounting to $125,000. This is believed to be the largest order for rubber tiling ever placed. It will be laid in the large court rooms, corridors, judges' chambers, ante-rooms, etc., in different designs, to conform with the color scheme of the various rooms.

Compound Doors.

The American Compound Door Company, of West Twenty-first and Morgan Streets, Chicago, Ill., offer a door differing radically in appearance from the usual paneled door. In a large pamphlet of some thirty pages, illustrated in colors, these doors are presented in a manner to show the artistic and durable character of the product.

Door making, like other lines of manufacture, is an evolution. These doors present a flat, unbroken surface, showing all the delicate marking and tracer of the wood, and in some of the samples shown so carefully selected is the wood that it is with no great stretch of imagination that one can find the suggestion of a picture on the surface.

The New York office of the company is in charge of Mr. C. L. Burns, at 136 Fifth Avenue.

Catalogues Received.

House Heating Boilers and Fittings.

The Illinois Malleable Iron Co., of 517 Diversey Boulevard, Chicago, Ill., have issued a pamphlet of thirty-two pages illustrating and setting forth the merits claimed for their Union Vertical Sectional House Heating Boilers for Steam or Water. There is also included a description of the Eureka Combination Circulation Fitting for one-pipe water work. This fitting is designed to take the place of the usual elbows, tees and nipples commonly employed in taking branches from the main flow pipe of a single pipe hot water system. They claim that in addition to saving the labor expended in making up the fittings in the usual manner and the decreased liability of leaky joints, the friction is reduced to a minimum.

These pamphlets will be furnished on request.

Modern Lighting Methods.

The study of illumination can perhaps be said to have reached the highest stage in the product of J. P. Frink, of 531 Pearl Street, New York City. We have received from this firm a number of attractively printed and illustrated pamphlets, which taken together form a pocket library on the subject of lighting. They are:

Some Early American Churches, Published in the interest of the Frink church light.

Profit Bringing Light.

Describing in text and pictures the best methods of securing light in stores and windows which will best attract attention.

Reflectors for Lighting Pictures.

Every visitor to a gallery or exhibition of pictures knows how necessary to the enjoyment of the pictures displayed is their proper lighting. This pamphlet convincingly tells how it is best accomplished.

Reflectors for Electric and Combination Fixtures.

In this pamphlet is summed up every form of lighting based on the many years of experience of this well-known house. We are advised that this series of pamphlets may be had on application by architects and builders, and they are worth asking for.
NEW HAMPSHIRE

Gorham.—Before the summer is over a new summit house is expected to take the place of the famous hotel on top of Mt. Washington which was recently burned and which was one of the best known hotels in the country.

Manchester.—A building committee has been named, by the members of the Oak Hill Lodge of East Manchester, in charge of new lodge building which it is proposed to erect at Hall Street and Lake Avenue, to be four stories high and to cost about $15,000.

Warren.—At a meeting of the Simonds Free High School Association recently it was decided to make an effort to raise funds for the erection of a large new addition. Address Jesse B. Pattee of this place.

MASSACHUSETTS

Brookline.—B. J. Connolly is reported to be contemplating the erection of an apartment block on his property at the corner of Winthrop Road and Beacon Street.

Cambridge.—We understand that the plans for the new edifice to be erected by the congregation of the Swedish Lutheran Evangelical Society are being revised and that bids will shortly be called for.

Chelsea.—Architects Kilham & Hopkins, of Boston, have been appointed, to prepare plans for the new school house to be erected at this point.

Lynn.—We understand from the press that Architects Edwin Earp & Sons, of 23 Union Street, have been selected to prepare the plans for the new police court house to be erected at this point.

Randolph.—The new high school to be erected from designs by Hardy & Gove, of Boston, will be built of brick and stone trimmings and will be 57 by 89 feet. The cost will be about $30,000.

At a recent meeting of St. Mary's Church a committee was appointed to investigate the needs of a church, and it is reported that a new building is to be commenced. James W. Keen is chairman of the committee and can be addressed for further information.

Rockbury.—A six-family apartment house will be built at the corner of Worthington and Smith Streets for John Sullivan, it is said, to cost $15,000.

South Boston.—Miss Mae Keeley is president of the Jacqueminot Club of this city, which is discussing a new Bachelor Girls' Clubhouse at Monopotess Miss Keeley can be addressed at her home, 21 Gates Street, South Boston.

Springfield.—We wish to correct an error in reporting in our issue of the 24th inst. the name of the architect for the Emmanuel Church, Springfield, as B. Hammett instead of B. Hammett Seabury.

Winterport.—Samuel S. Chase of Revere, Mass., it is said, has purchased property at 170 Circuit Road, Court Park, to be used for the erection of a modern new residence.

RHODE ISLAND

Providence.—It has been proposed to purchase the site at Laurel Hill Avenue and Cleveland Street for a new schoolhouse to be erected for the Eighth Ward. Address School Board for further information.

CONNECTICUT

Bridgeport.—The congregation of the People's Presbyterian Church is reported to be discussing the erection of a new church edifice.

According to reports, plans drawn by Architect Ernest G. Southerly are being figured for an apartment house on Linden Street for the Sillman & Godfrey Co.

The joint committee on fire department of the Court of Common Council and the Board of Fire Commissioners of this city invite plans for new engine house to be erected in the vicinity of New Britain and Fairfield Avenues.

Stamford.—We understand that James Cooper is a member of the building committee here, which has been authorized to purchase site and secure plans for a new school house, cost of which is not to exceed, $50,000.

Waterbury.—Plans have been completed by Architect Leonard Ashwin, it is said, for a store and apartment block to be erected on West Main Street, near Willow Street, for Julius Chotzianoff. It will be five stories high.

NEW YORK

Buffalo.—The question of establishing a new municipal hospital here is now being discussed. It is stated that present facilities for treating sick and injured in this city are very limited and improvements are greatly needed at once.—Address Dr. Julius Ullman.

Corning.—It is said that Architect Otis Dockstader, of Elmira, N. Y., has been appointed to prepare the plans for the new high school building to be erected at this place.

Geneva.—At the meeting of the Board of Trustees of Hobart College this morning the question of erecting a dormitory for women in connection with the William Smith College for Girls was taken up. Plans for the new building, which, it is estimated, will cost in the neighborhood of $35,000, were submitted to the board. The plans were drawn by Arthur C. Nash.

Ithaca.—According to a recent announcement, Ithaca will soon have a new $800,000 hotel. The property was purchased at a receiver's sale this morning for $15,000 by Albert H. Buchanan, of New York City.

Jamestown.—It is reported in the daily press that funds are now being raised for a large and modern new Y. M. C. A. building to be erected here.

New York.—Architect John H. Duncan, we are informed, has completed plans for a new building, to be erected for the One Hundred and Twenty-fifth Street Realty Company at 200 West One Hundred and Twenty-fourth Street. Estimated cost, $25,000.

Crand & Co., builders, have invited estimates on the theatre for Maxine Elliott at 107 to 113 West Thirty-ninth Street, New York. Cost about $250,000. Marshall & Fox, of Chicago, are the architects.

J. Woodward Haven, according to reports, has purchased property at Seventy-ninth Street, west of Madison Avenue, for the erection of a large and handsome new residence, to cost about $260,000. Address Mr. Haven, 24 East Thirty-ninth Street.

Frederick C. Zobel, architect, is preparing plans for a ten-story fireproof office building, which is to be erected at a cost of $500,000 for the Brunswick Realty Company, upon the plot No. 123, 124, 125 East Twenty-seventh Street, running through the block to No. 118 East Twenty-eighth Street.

At a recent meeting of the Woodhaven Exempt Firemen's Association, held here, it was decided to accept gift of site on Broadway and Woodhaven Avenue, for the erection of a new building on the site. It is proposed to expend about $100,000. Plans not yet drawn.

Alexander Grant has purchased, through Arthur Salmons & Reamans, the property at the northwest corner of Broadway and One Hundred and Seventy-eighth Street, and it is currently reported that he will improve same with a high-class elevator apartment.

Norwich.—The physicians of this town are interested in the establishment of a new hospital here. For further information address the Town Clerk regarding the matter.

Perrysville.—Drum Hill high school has long felt the need of a new building, and the Board of Education is reported to be planning to call a special election for July to vote on raising $125,000 for erecting and equipping a modern new structure.

Rensselaer.—We understand that steps are being taken by the congregation of the Broadway Methodist Church for the purpose of raising funds for the erection of a new church edifice.

Yonkers.—Architect James A. Watson is preparing plans for an apartment house to be located on the corner of Cedar and Robbins Place for Charles Desegray and Mary A. Whitehead.

The same architect is also preparing plans for a building to be erected at 7 Yonkers Avenue for Alexander Dawson, together with numerous other dwellings in various parts of the city.

NEW JERSEY

Atlantic City.—The erection of a new primary school at Ventnor and Richmond Avenues, and a new grammar school on South Ohio Avenue, adjacent to site of the present high school, which is intended to relieve the congestion that exists in the present schools, has been taken up by the Atlantic City Board of Education at its next meeting.

Cape May.—We gather from the daily press that extensive alterations and improvements are to be made to the Public School building at this point.

Hackensack.—A Catholic church is to be erected here in the First Ward by the Polish speaking residents. It is stated that about $30,000 will be spent on site and new structure.

High Bridge.—According to reports, at the annual meeting of the Board of Corporators of Peddie Institute, the question of establishing a new boys' school was discussed.
HOBOKEN.—Architect Frederick Steigerleitner is said to have prepared plans for a handsome residence to be built by Anthony J. Volk in Castle Point Terrace at a probable expenditure of $30,000.

From the daily press we gather that Architect Max J. Berger is preparing plans for the new wing to be built to the County Hospital for the Insane at Snake Hill.

JERSEY CITY.—We understand that J. T. Rowland and Frank Eurick, Jr., architects, have completed the plans for the new school house, No. 32, to be located at Seventh and Coles Streets, and to cost approximately $80,000.

From authoritative sources, we understand, it was learned, that a syndicate composed of New York and local capitalists has plans under consideration for the erection of a strictly first-class hotel in Plainfield.

THOROFARE.—The Methodists of this place are said to be endeavoring to raise funds for a new church here. Site will soon be selected for modern new edifice.

UNION.—James Tapper, Jr., has purchased property on North Twenty-fifth and State Streets, it is reported, for the erection of a modern new residence.

WILLIAMSTOWN.—Henry L. Reinhold, Jr., architect, of Philadelphia, has been commissioned by the board of education to prepare plans for school building No. 6 for the Williamstown Board of Education.

PENNSYLVANIA

BENTLEYVILLE.—Steps have been taken by the School Board of Bentleyville, according to current reports, for the establishment of a high school there.

BOSWELL.—Sealed bids will be received by the Secretary of the Council at Boswell until July 7 for the erection of a municipal building.

BUTLER.—Members of the Christian Church, which has been conducting its different services in the hall in the Reber Building, have purchased property on West North Street, and will arrange for the building of a church structure.

CONNELLSVILLE.—It is stated in the daily press that the Connellsville Construction Company has planned to erect several new residences in the Davidson-Newmyer addition.

GREENSBURG.—At a recent session of the Pittsburgh Synod of the Evangelical Lutheran Church, the question of raising funds for Thiel College was discussed. The Board of Trustees is to have charge of securing plans, etc. Board is composed of Dr. A. L. Yount of Greensburg, Rev. F. A. Bowers, of Rochester, and Rev. Dr. W. J. Miller, of Greensburg, and others.

HARRISBURG.—We understand that the Pennsylvania Avenue of the Evangelical Lutheran Church, the question of raising funds for Thiel College was discussed. The Board of Trustees is to have charge of securing plans, etc. Board is composed of Dr. A. L. Yount of Greensburg, Rev. F. A. Bowers, of Rochester, and Rev. Dr. W. J. Miller, of Greensburg, and others.

INDIANA

BROWNSBURG.—The question of school accommodations for this township and Lincoln Township, has been agitated, and the matter is now in the hands of the Orange Township Board of Trustees, M. T. Hunter and others, of this town.

EVANSVILLE.—Architect Mannon Gilbert of the Hartnetz Building, is reported to be preparing plans for a handsome colonial residence to be erected at this place.

Architect Frank J. Schlotter is reported to have completed plans for the addition and remodeling of No. 8 House Block, located on the corner of Columbia and Third Avenues.

FRANKFORT.—According to the press, D. Gilbert, the photographer, is reported to be considering the purchase of property on West Clinton and Columbus Street, for the erection of new building.

HUNTINGTON.—At a recent meeting of the Advisory Board of Rock Creek Township, the erection of a new building in the section was discussed. Present school is inadequate.

INDIANAPOLIS.—The question of erecting a new clubhouse for the Indiana Club, is being discussed by the members of Canoe Club, is reported in the daily press.
The American Architect and Building News.

IOWA

Davenport.—Architect Studahr, of this place, we understand from the local press, is preparing plans for a new City Hall building, to be erected at Rock Island.

MINNESOTA

Augsburg Confession has purchased property at the corner of Pestalozzi Street and Grand Avenue, for a handsome new edifice, it is currently reported. Plans for new edifice not yet decided on.

COLOURED

COLORADO SPRINGS.—It is currently reported in the local press that the question of a new high school here is now being discussed. Address Principal John E. Richards for further information.

WYOMING

Sheridan.—A new building is soon to be erected for the local German Lutheran congregation. It is reported.

DISTRICT OF COLUMBIA

Washington.—Within a month construction work will begin on one of the finest court buildings in the country for the District Court of Appeals. An appropriation of $200,000 is to be spent in the erection of a new armory building on Nineteenth Avenue, between Pearl and Washington Streets. The Military Board of Denver can be addressed for further information.
tist Church Extension Society. It has been designed by Architect Edward H. Glidden.

**VIRGINIA**

Norfolk.—We are informed that Architects Neff & Thompson have prepared the plans for the new printing establishment to be erected in this city for Messrs. Burke & Gregory.

Richmond.—We understand that the Railroad Y. M. C. A. is endeavoring to raise a fund of $40,000 for a new building which has been proposed.

**WEST VIRGINIA**

New Martinsville.—The question of erecting a new hospital building at this point is being discussed, it is said. Drs. E. L. Boone, J. D. Schmied, H. N. Browne and F. E. Martin are reported interested.

**KENTUCKY**

Lexington.—According to reports, there are three new schoolhouses to be constructed in the local school district, and this work will commence just as soon as the plans can be drawn, contracts submitted and accepted.

Louisville.—The directors of the Standard Club, which recently sustained a large loss by destruction of its headquarters, are reported to be discussing the erection of a new home, which will be one of the most elaborate clubhouses in the city.—Address President Trest of the Standard Club.

At the national convention of the post office clerks, to be held in this city September 7, the question of a home is to be discussed; $10,000 is to be raised for this purpose. For further information address Geo. F. Pfeiffer, 377 Albion Street, Milwaukee, Wis.

De Molay Commandery is discussing a new home. At a recent meeting held for the purpose it was decided to raise $15,000 for this purpose as soon as possible.

**TENNESSEE**

Chattanooga.—It is currently reported in the local press that A. A. Dragoo has decided to erect a modern apartment house at the corner of West Fifth and Cedar Streets, to cost approximately $75,000.

Martin.—According to reports, Hall-Moody Johannesburg, W. Robinson, business manager, wants plans and specifications for new dormitory of ordinary Streets, to cost approximately $15,000.

Millington.—It is reported in the local press that a new public school building is to be erected here to cost in the neighborhood of $4,000.

**SOUTH CAROLINA**

Anderson.—At a recent meeting of the Clemson College Alumni Association a resolution was adopted providing for a new alumni hall, to cost about $75,000.

H. C. Tillman, P. H. Cunningham and R. E. Low are among the members of the building committee.

**GEORGIA**

Atlanta.—We learn from the daily press that the plans prepared by Architect A. Ten Eyck Brown for the enlargement of Infirmary have been accepted. Estimated outlay, $50,000.

We understand that one three-story brick factory and six stores are to be built on the old Atlanta Mills property at a cost of $60,000 by the Georgia Realty and Investment Company, of which Asa G. Candler is president.

Valdosta.—One hundred and fifty thousand dollars has been appropriated, we understand, for a new Federal building, to be erected at the corner of Central Avenue and Third Street. Bids will be received until July 15.

**ALABAMA**

Birmingham.—A new building for Commerce building is to be erected here. Site at Nineteenth Street and First Avenue has been purchased for this purpose, to cost about $1,000,000. Address President John L. Kaul of the association.

The Harbison-Walker Refractory Company, of which W. W. Croft, of Pittsburg, is president, will erect a plant in this district, to cost about $250,000. The company is represented in Birmingham by Hook & Fletcher.

Mobile.—At a special meeting of the building committee and members of the St. Francis Street Baptist Church, it was stated that funds have been secured for new building, to be erected as soon as possible.

**MISSISSIPPI**

Charleston.—J. W. Saunders, Mayor, according to published reports, will receive competitive plans for a school building, to cost approximately $20,000, until July 7.

Magnolia.—A new agricultural high school is to be established here, it is reported. Address C. H. Oken, county superintendent, for further information.

Opelousas.—According to reports, proposals are invited up to July 14 for the erection of St. Landry's Catholic Church, according to plans and specifications prepared by Dieder, Owen & Goldstein, Ltd., 702-704 Perrin Building, New Orleans, La.

**OKLAHOMA**

Fairview.—W. C. Edwards, of Wichita, Kan., is planning to erect, it is stated, a large business block soon at Fairview, that will be one of the best buildings at that place.

**ARKANSAS**

Batesville.—We learn from press dispatches that the Catholics of this place have purchased property here for the erection of a new church here.

**TEXAS**

Houston.—We understand that $80,000 has been appropriated for the construction of a courthouse at this place. Architects Long & Witchell, of Dallas, have prepared the plans. Bids will be received until Aug. 1.

**U.S.A.**

Trinity Springs.—A committee composed of Dr. Semmon, of Greenville; Dr. Ida V. Jarvis, of Sulphur Springs, and others, have been appointed to take charge of the matter of devising ways and means for the establishment of a nurses school at some point in Central Texas.

**UTAH**

Ogden.—Property at the corner of Twenty-fifth Street and Monroe Avenue has been secured, we understand, as a site for the proposed new high school building to be erected at this place.

Salt Lake City.—Architects Ramm Hansen and A. P. Merrill are said to be preparing plans for a new building to be erected at this place.

**OREGON**

Astoria.—The Chamber of Commerce is interested, according to exchanges, in the construction of a new hospital here as soon as possible.

Salem.—We understand that Architects Pugh & Legg are preparing plans for the new five-story steel-construction building to be located at the corner of State and Commercial Streets for the United States National Bank.

**WASHINGTON**

Seattle.—M. Donohoe is reported to be contemplating the erection of a new building at the corner of Third Avenue and Stewart Street, to cost approximately $100,000.

J. H. Haight is also reported to be contemplating the expenditure of $250,000 for a new structure to be located at Second Avenue and Pine Street.

We learn from the daily press that plans have just been completed by Architects Cutter & Malgren, of Spokane, for the new Country Club building.
A Famous Machine Shop

is that of the Jones & Lamson Machine Co., of Springfield, Vt. It is modern and complete in every detail, and consequently, the "saw tooth" roof of this fine factory is equipped with eighty 20-inch metal top

Burt Ventilators

Jones & Lamson Machine Co., Springfield, Vt., using 20-inch Metal Top "Burt" Ventilators are:
Munson Mfg. Co., Paterson, N. J., 3 & 4 inch Burt Ventilators. We have recently equipped 12 machine shops in addition to the above.

Burt Ventilators were chosen for this work because they were absolutely the best to be had, and strictly high grade in every respect. They are provided with patented sliding sleeve dampers which can be adjusted to any degree, and is held permanently without tying the rope to hook, nail or post, as in the case of the common damper. Where glass tops are ordered, ventilator is a combined sky-light and ventilator, and damper can be closed without interfering with the light.

Send for our new 92-page catalog giving fine illustrations of mills, shops, factories, and residences where Burt Ventilators are in successful use.

Burt Mfg. Co., 550 Main St., Akron, O.

POSITIONS WANTED

A N architectural draftsman desires a position in a good office, South or West preferred. Has had technical training in the East and five years' experience. Can make designs; take working drawings through from sketches, detail, make perspectives and all kinds of renderings; especially good at pen and ink. Address 25-A, care American Architect.

DRUGGISTMAN, Architectural, 25 years of age, desires position; six years' experience; can work on and complete working drawings from sketches; also full size and scale details and perspectives. Moderate salary. Address J. A. S., care American Architect.

PROPOSALS

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 19, 1908. Sealed proposals will be received at this office until 3 o'clock p.m. on the 30th day of July, 1908, and then opened, for furnishing and delivering the drafting materials required in accordance with the specifications and schedule, copies of which may be had at this office. James Knox Taylor, Supervising Architect.

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 22, 1908. Sealed proposals will be received at this office until 3 o'clock p.m. on the 6th day of July, 1908, and then opened, for furnishing and delivering post office lock boxes, etc., as they may be ordered for post offices in public buildings under control of the Treasury Department, during the fiscal year ending June 30, 1909, in accordance with the drawing and specifications, copies of which may be had at the discretion of the Supervising Architect. James Knox Taylor, Supervising Architect.

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 24, 1908. Sealed proposals will be received at this office until 3 o'clock p.m. on the 17th day of July, 1908, and then opened, for furnishing and delivering the drafting materials required in accordance with the specifications and schedule, copies of which may be had at this office. James Knox Taylor, Supervising Architect.

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 25, 1908. Sealed proposals will be received at this office until 5 o'clock p.m. on the 10th day of August, 1908, and then opened, for the reconstruction of and repairs to the U. S. Post Office, Court House, etc., at San Francisco, Calif., in accordance with drawings and specifications, copies of which may be had at the discretion of the Supervising Architect. James Knox Taylor, Supervising Architect.

DICKERSON STREET, NEWARK, NEW JERSEY

"JABBELL"

A. W. FABER, 41 DICKERSON STREET, NEWARK, NEW JERSEY

DRAWING PENCILS

Made in 16 degrees, 6B to 8H

THE FINEST IN EXISTENCE

Sold by all stationers and dealers in artists' materials. Sample sent to all parties interested on receipt of 10 cents in postage stamps.

EDISON GATES, BOSTON, MASS.
Widow & Bipley, Architects.

THE CORHAM CO ARCHITECTURAL BRONZE
FIFTH AVENUE NEW YORK
WORKS AT PROVIDENCE, R.I.

Smoky Fireplaces exasperate the owner who blames the architect, who blames the mason, who—but the fireplace still smokes on. The Covert Throat and Damper does away with this unpleasant condition.
Send for “Hints on Fireplace Construction” to
The H. W. Covert Co. 262 Greenwich St., New York

Ecclesiastical Domes
Bound in Red Cloth, Gilt Top, containing 88 Plates, each 10x14. Price $5.00
The American Architect, Publishers
239 WEST 39TH STREET, NEW YORK

DO YOU KNOW
Murdock-Shaw Perfect Fireplace Dampers Are Specified by Architects Throughout the Country?

PREVENT SMOKY FIREPLACES. Ask for Circular and Prices from
MURDOCK-SHAW CO. 127 Federal Street
BOSTON, MASS.

PORCELAIN PLUMBING GOODS

A Bath Room for High Class Residences.

Catalogue “C” is ready for distribution. Write us on your own letter head if you have not received a copy.

The Monument Pottery Company
Manufacturers of Porcelain Plumbing Goods and Vitreous Lavatories
TRENTON, New Jersey, U.S.A.
IN THE FIRST PLACE, MR. ARCHITECT, you want to know that the Boiler you specify is right, right for yourself and right for your client.

**BOSTON COPPER BOILERS**

Are right in every detail, and guaranteed to be the best made. We make four grades of tank and pressure boilers to stand any pressure up to 600 pounds, all sizes to order.

Have been placed in the leading buildings of the country by some of the best known architects; let us send you list and give you prices. You will be interested in our illustrated boiler circular, and price list, whether you are ready to specify now or later.

**DAHLQUIST MFG. CO., Coppersmiths and Metal Workers**

40 WEST 3d STREET, SOUTH BOSTON, MASS.

---

**SEATS of the COLONISTS**

**PART I.—Photographs and measured drawings of Chippendale furniture, together with descriptive text. PRICE, $5.00.**

**THE AMERICAN ARCHITECT, 239 WEST 39TH STREET, NEW YORK**

---

**CONCORD WHITE GRANITE**

A selected light granite that will bring out the details, carving and other main features most satisfactorily.

**FRANK H. SCHILLING, Perry Bldg., PHILADELPHIA, PA.**

---

**The Broughton Mixer**

for plaster, cement, lime, patent flooring, etc.

**WM. D. DUNNING**

231 W. WATER ST.

SYRACUSE, N. Y.

---

**DESCRIPTIVE PRICE LIST OF PUBLICATIONS OF THE AMERICAN ARCHITECT, 239 WEST 39TH STREET, NEW YORK**

**The Georgian Period**

An Encyclopedia of American Colonial Architecture

Edited by William Rotch Ware.

"A fine, even a monumental, piece of work."—New York Times.

"The most important work on architecture yet produced in America."—The Nation.

"The most interesting of all American publications in the field of architecture."—Review of Reviews.

"A magnificent collection of specimens of Colonial architecture."—Atlanta Journal.

"This work . . . is of extraordinary importance to the architect whose ambition rises above the building of cottages."—Boston Transcript.

"The publication is as interesting to the layman as it must be useful to the architect."—New York Tribune.

"It is a work of superior excellence and great usefulness."—Irish Builder, Dublin.

"Nothing that care can do has been spared to make the drawings useful and thoroughly practical for the use of the decorator and architect."—The Building News, London, England.

"The illustrations are extremely attractive. . . . In short, the pictures here offered us, the objects represented, their reverse and regard shown, may set some of us thinking and wondering, and cannot but help to raise our taste and widen our sympathies."—Architectural Review, London.

The complete edition of The Georgian Period is published in three forms, the style and price of each of which are:

- Twelve parts in separate portfolios; if payment is made in installments, $5.00; cash with order, $5.00. Bound in three large volumes; dull surface brown canvas, with leather label, $6.50; half morocco, $6.60. 351 plates; 525 text illustrations.

A circular containing reduced sample pages will be sent on request.

**A Students' Edition of the Georgian Period**

is also sold. It consists of the leading article on Colonial Architecture and 100 of the most useful plates from the complete edition. These are contained in one large portfolio and the price is $15.00.

**Iron Door and Window Grilles**

One hundred and four plates, each 10x14 inches. Price, bound in red cloth, gilt tops, $7.50; in portfolio, $6.50.

**Renaissance Doorways**

One hundred and four plates, each 10x14 inches. Price, bound in red cloth, gilt tops, $7.50; in portfolio, $6.50.

**Cathedral of St. John**

The Divine

Illustrating the Competitive Designs for the great Protestant Episcopal Cathedral now being erected in New York.

Price, bound, $4.00; in loose sheets, $2.50.

**Eccelesiastical Domes**

Bound in red cloth, gilt top. Containing 52 plates, each 10x24 inches. Price, $5.00.

**Pulpits, Fonts and Organ Cases**

Bound in red cloth, gift top. Containing 80 plates, each 10x24 inches. Price, $5.00.

**Seats of the Colonists**

Measured drawings and photographs of examples of Colonial furniture. In portfolio, 10x24 inches. Price, $5.00.

**Norman Monuments of Palermo**

By Arne Dehll. Illustrated with 50 plates, 13x17 1/2 inches. Price, bound, $10.00; unbound, $9.00.

**The Library of Congress**

20 plates, folio. Price, $5.00.

**Renaissance Fireplaces**

Forty gelatine plates, on bond paper, 9x11 inches, in vellum case. Price, $5.00.

**Monumental Staircases**

Forty gelatine plates, on bond paper, 9x11 inches, in vellum case. Price, $5.00.

Publication Office: **FLATIRON BUILDING, NEW YORK**
**The Window-Chute**

**The One With the Glass**

A solid metal sheet can be inserted as easily as a pane of glass if light is not wanted.

Made only by

**HOLLAND FURNACE CO., Holland, Mich.**

Write for prices and particulars.

"It is worth several times the price even to an old experienced concrete man, and such the reviewer considers himself."—Journal of the Western Society of Engineers.

Concrete Construction
METHODS AND COST

By HALBERT P. GILLETTE
M. Am. Soc. C. E., M. Inst. M. E.
Managing Editor, Engineering-Contracting
and
CHARLES S. HILL, C. E.
Associate Editor, Engineering-Contracting

THIS book handles the subject of concrete construction entirely from the viewpoint of the builder of concrete structures. The testing of cement, the physical properties of cements and concrete, and the design of concrete structures are not considered. The authors have aimed to eliminate all matter not germane to the constructing end of their subject. By doing this it has been possible to crowd a vast amount of detailed information on methods and cost of concrete construction into a volume of moderate size. The book is a treatise on the methods and cost of building in concrete.

Cloth, 6x9 inches, 700 pages, 306 illustrations, $5 net, postpaid

Sample Pages and Table of Contents Sent on Request

The Myron C. Clark Publishing Co.
355 Dearborn Street
CHICAGO, ILL.

SEND us plans and specifications and let us figure with you upon all

Interior
Wood Work

WE MAKE A SPECIALTY OF
CABINET WORK
BANK AND OFFICE FIXTURES
HARDWOOD TRIM COLUMNS
VENEERED DOORS, etc.

HYDE-MURPHY CO.
RIDGWAY, PENNA.

Medusa Waterproof Compound
MAKES ALL CONCRETE IMPERVIOUS TO WATER
It is not a wash or experiment. Gives permanent results and will not affect the strength of concrete. Beware of imitations and adulterations that are sold for less than it costs to manufacture MEDUSA.


WRITE FOR PAMPHLET
SANDUSKY PORTLAND CEMENT CO., Sandusky, O.
Send for free sample of true Portland White Cement
STANLEY’S BALL BEARING HINGES

In WROUGHT BRONZE and STEEL
The improved washer protects the balls against moisture
and dust. For Sale by Leading Hardware Dealers.

Visit the STANLEY WORKS
NEW BRITAIN, CONN. NEW YORK CHICAGO

VARNISH ENAMEL

FRENCH’S
ESTABLISHED 1844
PHILADELPHIA
U.S.A.

“RELIABILITY” “DURABILITY”

LOOMIS FILTERS

Established 1880
Improved System Simple and Effective
LOOMIS-MANNING FILTER CO.
Main Office:
828 Land Title Bldg., Broad and Chestnut Sts., Philadelphia
Boston Buffalo New York Baltimore Washington Chicago

LOOMIS-MANNING FILTER CO.

Main Office:
828 Land Title Bldg., Broad and Chestnut Sts., Philadelphia
Boston Buffalo New York Baltimore Washington Chicago

ARE YOU INTERESTED IN

Modern Sewage Pumping Machinery
FOR CITY BUILDINGS?
If so, write at once for our NEW CATALOGUE “B.” Just out.
YEOMANS BROTHERS, 1141 Monadnock, CHICAGO

Pittsburgh: H. C. DAVISON, Keenan Bldg.

THERMOSTATS

THE MOST EFFICIENT THERMOSTAT
for the automatic control of direct or indirect heat. Write for list of installations and new catalogue.
National Regulator Co.
334 Dearborn St., CHICAGO, ILL.
Eastern Office:—72 E. 42d St., N. Y.

AGENTS:
DEAN BROS. STEAM PUMP WORKS
INDIANAPOLIS, IND.
Elevator Pumps, Boiler Feeders, Water Supply Pumps,
Duplex Durable Pumps, Fire Pumps, Receivers, Surface and Jet Condensers.

U. S. Changeable Signs
ARE SOLD OUTRIGHT
Made according to architects' designs or sold out of stock in quartered oak or bronze.
U. S. CHANGEABLE SIGN CO., 3 West 29th St., New York

HOME MECHANICAL DRAWING
STUDY Courses in Reinforced Concrete Construction, Structural Drafting,
AMERICAN SCHOOL OF CORRESPONDENCE, Chicago

SHOW WINDOWS
ought to be well lighted, if at all. Not a single objection can be raised against the Frink system of show window lighting. The Best Stores use it.
I. P. FRINK, 551 Pearl Street, New York

LUFKIN STEEL TAPES
Are Indispensable for Accurate Work
Made in all styles and sizes for all classes of work.
Send for catalog.
THE LUFKIN RULE CO., Saginaw, Mich., U. S. A.
Windsor, Can.

THE UNIQUE WATER CLOSET
See our Advertisement next week for interesting information about the 48-
STAPLES VALVE CO., NEWBURGH, N. Y.

Richardson Fireproof DOORS
See our full page advertisement in this paper last week or next or write to
THORP FIREPROOF DOOR CO., MINNEAPOLIS.

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.
215 N. Calvert St., Baltimore, Md.

The COULSON Patent Store Front Construction
is complete, practical, the glass is set in from the outside, saving time, expense and decreasing risk. Broken glass can be replaced without removing the window fixtures or decorations. Gives greatest strength with least obstruction of light.
Catalogue "D-700" sent upon request.
We solicit correspondence with Architects.
J. W. COULSON & CO.
234 North 3rd St.
COLUMBUS, OHIO
UNIVERSITY OF PENNSYLVANIA
SCHOOL OF ARCHITECTURE

FOUR-YEAR COURSE. (Degree B. S. in Arch.) (Architectural engineering may be taken in lieu of advanced design, etc.)
GRADUATE YEAR. (Degree M. S. in Arch.) (Allowing specialization in design or in architectural engineering, etc.)

SPECIAL COURSE OF TWO YEARS. (Certificate.) (For qualified draughtsmen; allowing option in architectural engineering.)
COMBINED COURSES IN ART AND ARCHITECTURE, by which A. B. and B. S. in Arch. may be taken in six years.

COLLEGE GRADUATES granted advanced standing.

SUMMER COURSES in elementary and general subjects through which advanced standing may be secured.

For full information address: DR. J. H. PENNIMAN, Dean, College Hall, University of Pennsylvania, Philadelphia, Pa.

THE SOCIETY OF BEAUX-ARTS ARCHITECTS
has established
A FREE COURSE OF STUDY
open to undergraduates and students of any city, modeled on the general plan pursued at the École des Beaux-Arts in Paris, and containing frequent problems in Ornament, Design, Architectural Engineering, etc.

For information apply to the Secretary of the Committee on Education, 3 East 33rd St., New York City.

Washington University
St. Louis, Mo.
offers a four-year course in Architecture leading to the Degree B. S. in Arch. Admission by examination or by diploma from accredited schools or certificates from other colleges. Qualified draughtsmen admitted as special students.

For information apply to the Department of Architecture, Washington University.

"NORMAN MONUMENTS OF PALERMO"
BY ARNE ODELL
Illustrated with 50 Plates, 13 x 17 1/2". Price, bound, $10.00. Unbound, $9.00.
The American Architect, Publishers

ECCLESIASTICAL DOMES
Bound in Red Cloth, Gilt Top, Containing 82 Plates, each 10 x 14 Price, $5.00
The American Architect, Publishers

THE L. SCHREIBER & SONS CO.
BRANCH OFFICES NEW YORK · CHICAGO · PITTSBURG · ATLANTA · NEW ORLEANS · SAN FRANCISCO · RICHMOND

"OZONE" Window Ventilator
FOR OFFICES, PUBLIC BUILDINGS, HOSPITALS, HOMES, &C.

This is a simple device, embodying all the best features of every window ventilator on the market; no contrivance to the cost is one-half of some factory ventilators. The zinc screens filter the dust and are not affected by rain or weather; the wood part is made from selected material with superior workmanship. A small damper can be adjusted to close, partly open, or completely open the ventilator.

INTERNATIONAL MOULDING CO.
240 Dearborn St., Chicago

258x481 ECCLESIASTICAL DOMES
Bound in Red Cloth, Gilt Top, Containing 82 Plates, each 10 x 14 Price, $5.00
The American Architect, Publishers

THE L. SCHREIBER & SONS CO.
BRANCH OFFICES NEW YORK · CHICAGO · PITTSBURG · ATLANTA · NEW ORLEANS · SAN FRANCISCO · RICHMOND

"OZONE" Window Ventilator
FOR OFFICES, PUBLIC BUILDINGS, HOSPITALS, HOMES, &C.

This is a simple device, embodying all the best features of every window ventilator on the market; no contrivance to the cost is one-half of some factory ventilators. The zinc screens filter the dust and are not affected by rain or weather; the wood part is made from selected material with superior workmanship. A small damper can be adjusted to close, partly open, or completely open the ventilator.

INTERNATIONAL MOULDING CO.
240 Dearborn St., Chicago
The American Architect and Building News.

**The Georgian Period**

**(STUDENTS' EDITION)**

Consists of the leading article on Old Colonial Architecture from the complete edition and 100 full-page plates chosen for their value to students. **Price: $15.00**

THE AMERICAN ARCHITECT
239 West 39th Street, New York

---

**Cutler Mail Chutes**

Are the outcome of twenty-five years of experience, and in their present form embody the very last improvements, made under a series of patents, no one of which is more than eight years old, and four of which are dated March 10, 1908. They are fully protected and **Infringers are being Prosecuted**.

We have equipped thousands of buildings, our work is the standard and we quote low prices.

If you don't know our nearest agent, write to us for full information and estimates.

THE CUTLER MFG. CO.
ROCHESTER, NEW YORK.

---

**Ornamental Iron and Bronze**

Bronze Entrance Doors, New York Custom House.

Cass Gilbert, Architect.

---

The Winslow Bros. Company

CHICAGO       NEW YORK
Porcelain Enameled Plumbing Fixtures

Three of the largest factories of their kind in the world and the entire time and services of thousands of skilled men working night and day are required to supply the ever-growing demand for "Standard" Porcelain Enamelled Ware—the standard sanitary equipment for the modern American home.

"Standard" Porcelain Enameled Plumbing Fixtures have been known and sold for over 30 years. Year by year they have gained in popular favor. Year by year the demand for them has increased. By sheer force of superiority—by the splendid sanitation it provides, by its superior beauty, by the years of perfect service it insures—"Standard" Ware has won universal recognition as the most desirable sanitary equipment in the world.

CAUTION—Every genuine "Standard" fixture bears the "Standard" Green and Gold Guarantee Label. Look for this label on every fixture you purchase, as none are genuine without it. The "Standard" label gives protection you cannot afford to be without.

Address Standard Sanitary Mfg. Co., Pittsburgh, Pa., U. S. A.

DAHLSTROM PATENT
HOLLOW SHEET METAL DOORS
ARE USED IN THIS BUILDING

The Singer Building, New York. Ernest Flagg, Architect

We also make COLD DRAWN MOULDINGS

For Casings, Crown Mouldings, etc. Catalogue showing numerous designs sent upon application

DAHLSTROM METALLIC DOOR CO.
JAMESTOWN, N. Y.

CLOTHING LOCKERS

* The architect, to satisfy the owner completely, should specify ALLSTEEL Lockers. First cost is whole cost—never need repairs, indestructible even in severest use. Unit construction. Fireproof; unaffected by dampness. Perfectly ventilated; absolutely sanitary. Finish of hard-baked enamel, olive green or any specified color. Standard for use wherever locker equipment is required. * ALLSTEEL Locker Booklet AA, showing stock types, sent on request. Complete information on special lockers on learning number to a row, whole number, size and style.

The General Fireproofing Company, Youngstown, Ohio.

WELD Automatic Hot Water Heater

furnishes hot water at any given temperature and any quantity desired.

It is heated as used.
No tank is needed.
It is the simplest, most durable, most practical AUTOMATIC WATER HEATER MADE.

Write for booklet, prices, discounts, etc.

GEO. A. WELD CO., 79 Milk St., BOSTON, MASS.
The "GLOBE" Ventilator

IN BRASS, COPPER, GALVANIZED IRON
AND WITH GLASS TOPS FOR SKYLIGHT PURPOSES

SIMPLE  SYMMETRICAL  STORM-PROOF  EFFECTIVE

FOR PERFECTLY VENTILATING BUILDINGS OF EVERY CHARACTER

Smoky Chimneys Cured  Globe Ventilated Ridging
MANUFACTURED BY
EQUIP FOR MODEL AND PAMPHLET

GLOBE VENTILATOR COMPANY,  TROY, N. Y.

For nearly fifty years we have catered to the most important works of the leading architects of the world

THE STANDARD IN ALL COUNTRIES WHERE CEMENT IS KNOWN

"CERTIFIED CEMENT"

YEARLY CAPACITY OVER TWO MILLION BARRELS

For Factory, For Farm, For Home

Concrete Construction
is the Best


For the benefit of those who desire to make lasting improvements about the FARM, FACTORY, or HOME, and as a guide to those contemplating new construction, we have published the following books:

FOR THE SUBURBANITE AND FARMER,
"Concrete Construction about the Home and on the Farm," a book containing directions for making and handling concrete, also many specifications, sectional drawings, and photographs of the smaller constructions that can be built by the layman without skilled labor. Paper-bound copies free upon request. Cloth-bound copies, 25c. each.

FOR THE HOMEBuilder AND INVESTOR,
"Concrete Country Residences," a book containing photographs and floor plans of over 150 CONCRETE HOUSES, ranging in price from $1,000 to $10,000. The houses not only show a large variety of design, but are of several different systems of concrete construction. These are not imaginary sketches, but houses already built and designed by the best architects in the country. Copies (168 pages, size 10 x 12), will be sent express prepaid upon receipt of $1.00.

FOR THE MANUFACTURER AND MERCHANT,
"Reinforced Concrete in Factory Construction," a book containing, besides several general chapters on concrete, concrete aggregates, methods and materials for reinforcing—ten chapters giving detailed descriptions of ten concrete factories and warehouses erected in various parts of the country by different systems with photographs and sectional drawings, and specifications furnished by the engineers in charge of the work. This book, profusely illustrated (500 pages, size 6 x 9), pamphlet-bound, sent free upon request to ARCHITECTS, ENGINEERS, and MANUFACTURERS who contemplate building. Cloth-bound copies, 50c. each.

FOR THE MECHANIC AND ARTISAN,
"Concrete Cottages," a sixteen-page pamphlet showing photographs, floor plans and specifications for small concrete houses ranging in cost from $1,500 to $4,000. Copies sent free upon request.

The Atlas Portland Cement Co., 30 Broad St., New York Dept. D.
Atlantic Terra Cotta Company

THE LARGEST MANUFACTURERS OF
ARCHITECTURAL TERRA COTTA
IN THE WORLD

The first to introduce and develop ARCHITECTURAL FAIENCE. Our work is the standard of excellence. Our facilities for the prompt and skilful execution of contracts are unequalled.

FOUR LARGE FACTORIES AT
Tottenville, N. Y. Perth Amboy, N. J. Rocky Hill, N. J.

GENERAL OFFICES:
No. 1170 Broadway, New York City
Branch Offices and Agencies in All Principal Cities

WE MAKE ONE BRAND ONLY
The best that can be made
108 La Salle Street, CHICAGO

A DRILLED WELL
is the ideal source of water supply for country residences. Architects should get in touch with
ARTESIAN WELL & SUPPLY CO.
PROVIDENCE, R. I.

A PERFECT RECORD FOR ELEVEN YEARS
Always Reliable.
Send for 72 page booklet.
MARQUETTE CEMENT MFG. CO.
Marquette Building, CHICAGO

THE MODERN HOTEL OR PUBLIC BUILDING
is incomplete without its refrigerating plant or ice water system. We have installed
TRIUMPH REFRIGERATING OUTFITS
in the foremost public buildings in the United States and ask the privilege of quoting you.

THE TRIUMPH ICE MACHINE CO.
CINCINNATI, OHIO, U.S.A.