

THE SOUTHERN ARCHITECT AND BUILDING NEWS

VOLUME XLIX.

NUMBER 12

CONTENTS FOR DECEMBER, 1923

PLATE ILLUSTRATIONS.	Page	EDITORIAL—Reading and Illustrations.	Page
House of Mrs. A. P. L. Dull, Southern Pines, N. C. ----- <i>Aymar Embury, II, Architect</i>	43	"Greenwood," the Early Colonial Mansion of the late Thomas P. Jones, Thomasville, Ga.	37
House of James, L. Dickey, Esq., Atlanta, Ga. ----- <i>Hentz, Reid & Adler, Architects</i>	44	Southern Architectural Heirlooms (1817-1850)	49
House of K. K. Kirwans, Esq., Guilford, Md. ----- <i>William H. Emory, Jr., Architect</i>	45	Romanesque Architecture in Italy	53
House of Mrs. Ryburn G. Clay, Atlanta, Ga. ----- <i>Pringle & Smith, Architects</i>	46	Business and Commercial Structures Feature the South's Greatest Building Year ----- <i>By C. Armond Carroll</i>	59
Security Building, Memphis, Tenn. ----- <i>McKim, Mead & White, Architects</i>	60	Personal Mention	64
Arlington Hotel, Memphis, Tenn. ----- <i>Jones & Furbringer, Architects</i>	61	New Floor Design Reduces Load in Tall Steel Buildings	67
Hotel Statler, St. Louis, Mo. ----- <i>Geo. B. Post & Son, Architects</i>	62	Layout for Hotel Kitchen Equipment	73
Shrine Building, Memphis, Tenn. ----- <i>Barber & Cairns, Architects</i>	63	Structural Lessons Learned from Survey of Steel-Frame Buildings after Japanese Earthquake	77
Measured Drawings	47-48	Building Information	83
Detail of "Woodlawn," Va. ----- <i>By E. W. Donn, Jr.</i>		Building and Construction News	89

E. R. DENMARK, Editor.

Price \$2.00 Per Year.

Published Monthly by

HARMAN PUBLISHING CO.

This paper is issued between the 18th and 25th of the month previous to the month of publication date and mailed from our printing house at Dalton, Ga. Business Office, Atlanta, Ga. All letters should be addressed to the Atlanta office, 402 Trust Co. of Ga. Bldg. Southern Architect and Contractor, Atlanta, Ga., and Southern Building News, Memphis, Tenn., and Southern Building Record, Nashville, Tenn., Concrete Age, Atlanta, Ga., Consolidated.

1924 SCHEDULE FOR ADVERTISERS

For Jan. and Feb. issue copy and all cuts must reach us by	Dec. 20th
For March	Jan. 20th
For April	Feb. 20th
For May	Mar. 20th
For June	April 20th
For July	May 20th
For August	June 20th
For Sept.	July 20th
For Oct.	Aug. 20th
For Nov.	Sept. 20th
For Dec.	Oct. 20th



St. Mary's Hospital. Mayo Clinic, Rochester, Minn.
(Clarence Johnston, Architect)

The above magnificent hospital is finished throughout with one of Edward Smith & Company's

Hard Fossil Gum Varnishes

This Varnish is made of hard fossil gum which melts at about 650 degrees. It contains no rosin or ester gum which melts at around 150 degrees. The superiority of the Hard Fossil Gum Varnish, in hardness and durability, over that of the soft rosin and ester gum products, can be readily seen from the great difference in the fusing point.

The Mayo Clinic is finished with a Flat White of the same make. This white was applied after many tests, and is still giving the best service. vice.

Edward Smith & Co.

127 West Ave.,
Long Island City, N. Y.

3532 S. Morgan St.,
Chicago, Ill.



"I have specified 'The Best Glass' for you, Mr. Homeowner, because it is durable and increases your property value; for your wife because she will appreciate its beautiful lustre; and for the children because they will benefit by a generous supply of healthful sunlight.

"I have provided you, Mr. Glazier, with 'The Best Glass' because it permits easier glazing and because secure expert packing means economy in its use."

Why It's the Best Glass

Our melting furnaces, *the largest in the world*, permit uniformly melted glass. Improved mechanical processes of drawing and blowing give greater tensile strength and higher modulus of rupture than any other window glass, plate glass or rolled glass.

The best flattening ever obtained is the result of our improved blowing machines.

New methods of flattening give our glass a wonderfully even surface, preserving the brilliant lustre produced in drawing. Our glass is *uniformly* flat, containing no reverse curves, has less wave than other glass, and consequently shows less distortion.

It is *uniform* in thickness, and, being perfectly annealed, does not break as easily as ordinary glass.

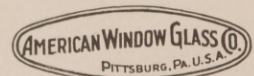
Washing in an acid bath prevents discoloration and permits ready detection of defects.

Our glass cuts perfectly on both sides and is graded to a standard of quality now recognized as national and distinctly higher than foreign standards.

Uniformity of flatness, well made boxes, careful packing and skillful loading prevents breakage in shipment.

Specify "The Best Glass," the quality of which is guaranteed by the elliptical trade mark on every box.

You will be interested in our Crystal Sheet, 34 and 39 oz. per sq. ft. Write for samples



AMERICAN WINDOW GLASS CO.
GENERAL OFFICES PITTSBURGH, PA. *The BEST glass* BRANCHES IN PRINCIPAL CITIES





The Penton Press Building
 Cleveland, O.
 George F. Burrows
 Architect
 Hunkin-Conkey Construction Co.
 Builders

Saving Minutes and Dollars

IN SUCH buildings as that of The Penton Press, PEELLE Freight Elevator Doors are saving time in loading and unloading freight elevators. Their counterbalanced vertical operation gives full clearance of door opening in the minimum of time. The exclusive Truckable feature provides a level, unbroken passage between building floor sill and elevator car.

The sturdy scientific construction of PEELLE DOORS saves the dollars usually spent on repairs and replacements of ordinary doors. They are built to endure—to resist the wear and tear of the most strenuous service.

These and many other merits of PEELLE Doors are fully described in the PEELLE catalog. You are invited to send for a copy, as well as the advice of a PEELLE representative.

THE PEELLE COMPANY Brooklyn, N. Y.
 Boston · Chicago · Cleveland · Philadelphia · and 12 other cities

PEELLE Freight Elevator DOORS

Counterbalanced-Truckable





ENTRANCE DETAIL
OLD STATE CAPITOL BUILDING, MILLEDGEVILLE, GA.

THE SOUTHERN ARCHITECT AND BUILDING NEWS

VOL. XLIX.

DECEMBER, 1923.

NUMBER 12

“Greenwood,” the Early Colonial Mansion of the Late Colonel Thomas P. Jones, Thomasville, Ga.

The Winter Home of Payne Whitney, Esq., New York.

By E. R. Jerger.

Following a picturesque road for several miles westward from the little tourist town of Thomasville, Ga., we find in “Greenwood,” the early Colonial mansion of the late Colonel Thomas P. Jones, one of the finest examples of Greek Revival houses in the South. The house was designed by John Wind, a graduate of the Queens School of Architecture, England, and his diploma was signed by Queen Victoria. The actual construction of the house was begun in 1835 and it took nine years to carry the building to completion.

Its greatest charm lies in its simplicity of treatment and its true classic lines. Four large

Ionic columns resting upon square brick bases rise directly from the ground to support the light wooden pediment-fronted gable roof that overhangs, at two-story height. The second story balcony is supported by minor square columns rising from the first veranda floor. The gable is of red cedar that was carefully selected from the native trees. The only ornamentation is a beautiful magnolia bloom that stands out in sharp relief in the center of the gable, while four laurel wreaths adorn the frieze above each of the supporting columns. The balustrade of the second story veranda is interesting, resembling very much several ribbons caught in the middle with



VIEW OF THE SUNKEN GARDEN.

Photo by A. W. Moller.



VIEW OF HOUSE AS IT IS SEEN TODAY.



VIEW OF HOUSE THIRTY-FIVE YEARS AGO.



VIEW LOOKING TOWARD SUNKEN GARDEN.



VIEW OF LEFT WING FROM GARDENS.



VIEW OF ENTRANCE GATEWAY.



DRIVEWAY APPROACHING HOUSE.



VIEW OF ENTRANCE HALL.



VIEW OF LIVING ROOM.

flaring ends. The treatment of the interior is very simple throughout as can be seen from the illustrations of the living room and the entrance hall. An interesting feature of the entrance hall is the very charming winding stairway at the rear. The start of the rail is made from a small, unobtrusive newel surrounded by a circle of balusters. The spindles of the baluster are of the round turned type, and the wainscoting rising with the stair is of simple panel design.

The brick used in the construction of the house were made by the slaves and burnt near the building, while all the timbers were carefully selected from virgin pine and hand hewn, all joints were mortised and tenoned together.

After the death of Colonel Jones the estate was sold several times and finally came into the possession of the late Colonel Oliver H. Payne of New York. The late Stanford White, remembered as one of the country's foremost architects, was invited by Colonel Payne to restore the old house to its original beauty. Very few changes,

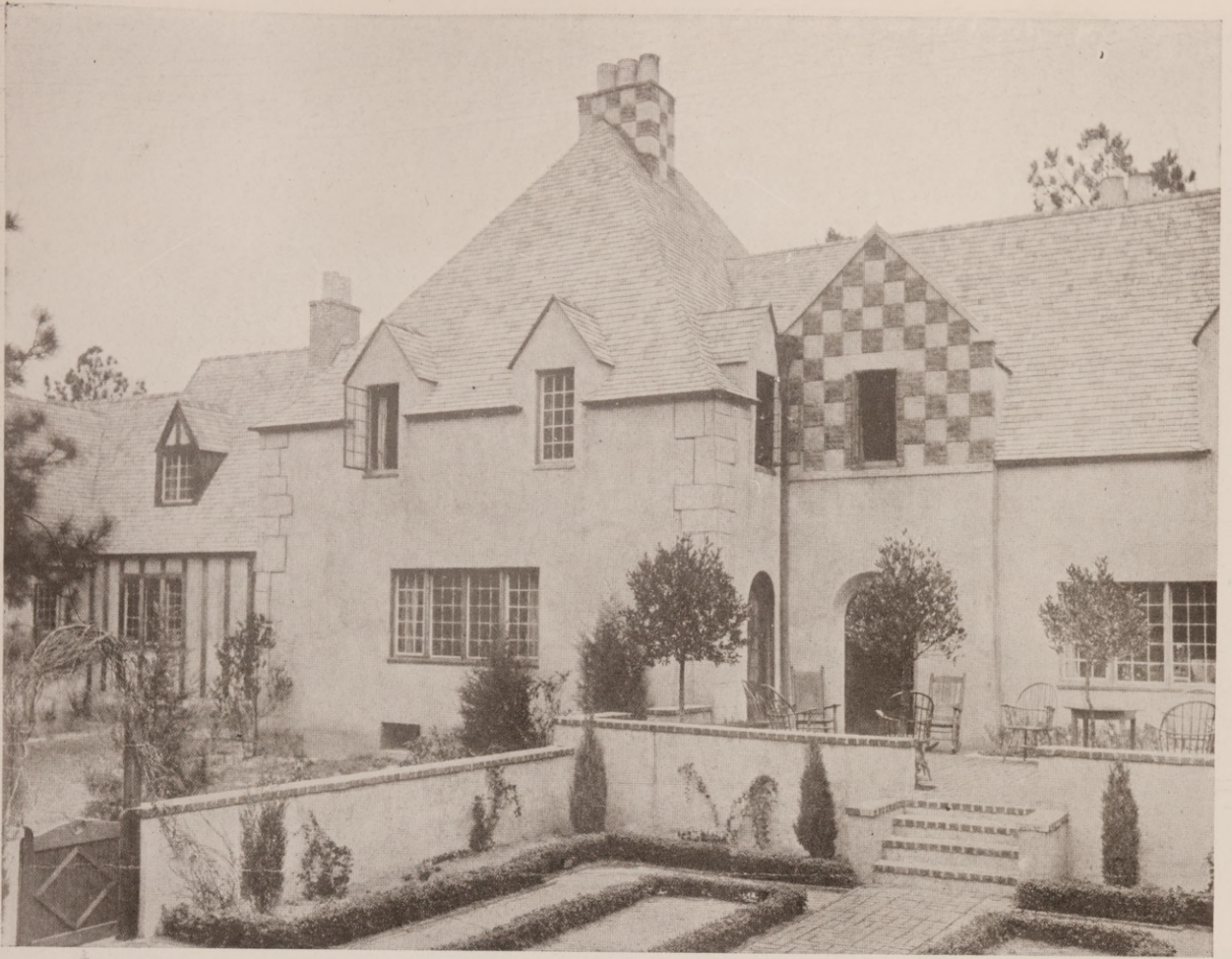
however, were made with the exception of changing sloping eaves of the side rooms, making a flat roof and adding the balustrade in keeping with that of the second story veranda.

Leaving the natural beauty of the grounds Colonel Payne added to their attractiveness by an English sunken garden, the fountain in the center of the garden was brought to this country from the ruins of Pompey in Italy, a palm garden, an azalea avenue and numbers of additional magnolias and other trees which seem to blend with the old world air of the estate. The beautiful ornamental iron gateway forming the entrance to the grounds was imported from Florence. This gateway is an imposing structure and shows the master hand of the Florentine craftsmen.

After the death of Colonel Payne the estate was willed to his nephew, Payne Whitney, of New York, who now holds possession of the place, using it as a hunting lodge during the winter months.



VIEW OF THE SUNKEN GARDEN WITH THE PALM GARDEN IN THE BACKGROUND.



VIEW OF GARDEN SIDE.



ENTRANCE FRONT FROM APPROACH.
HOUSE OF MRS. A. P. L. DULL, SOUTHERN PINES, N. C.
AYMAR EMBURY II, ARCHITECT.



VIEW FROM LAWN.



ENTRANCE DOOR
HOUSE OF JAMES L. DICKEY, ESQ., ATLANTA, GA.
HENTZ, REID & ADLER, ARCHITECTS.



ENTRANCE VIEW.



LIVING ROOM.
HOUSE OF K. K. KIRKANS, ESQ., GUILFORD, MD.
WILLIAM H. EMORY, JR., ARCHITECT.



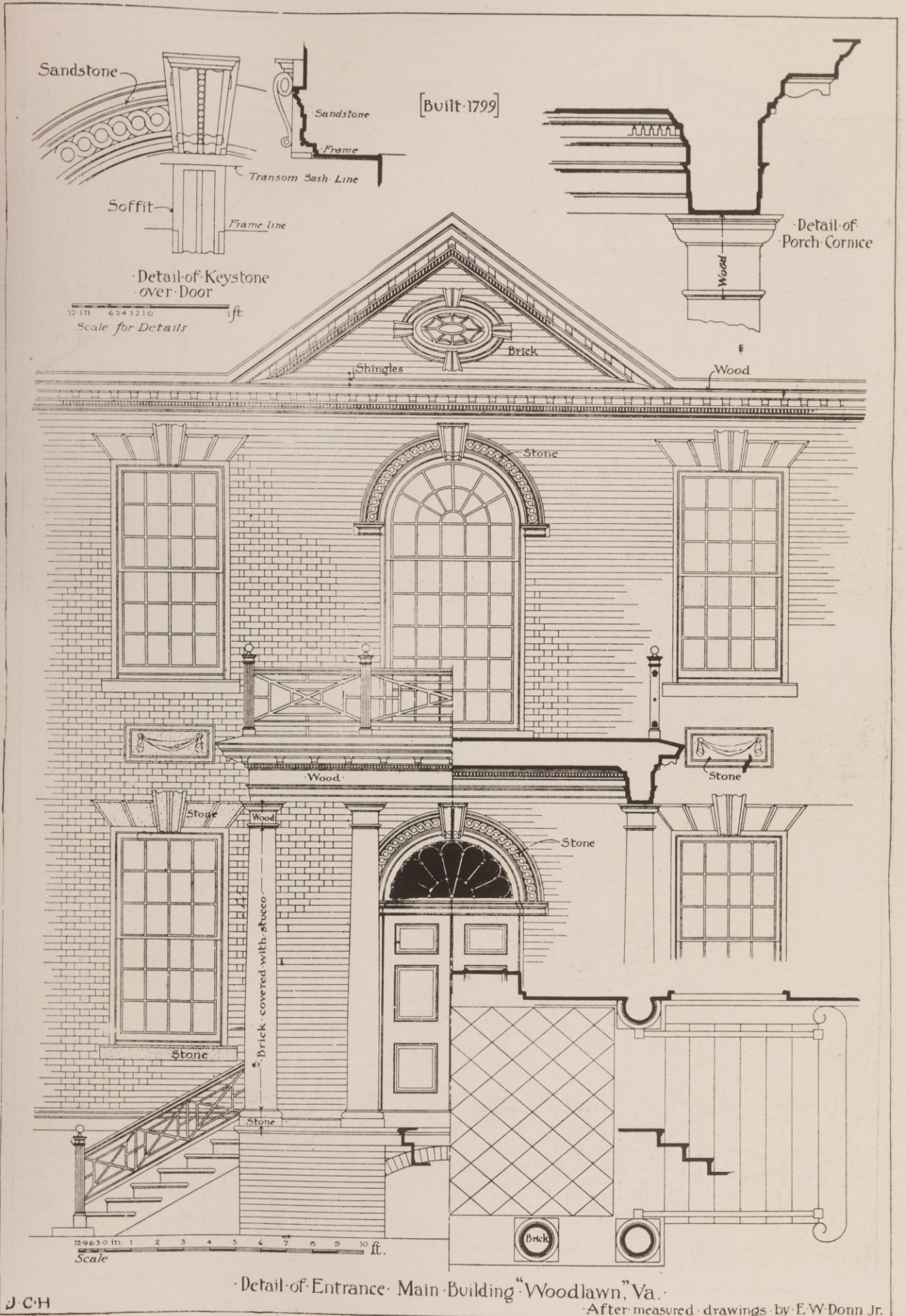
VIEW OF FRONT ELEVATION.



VIEW OF SIDE ELEVATION.

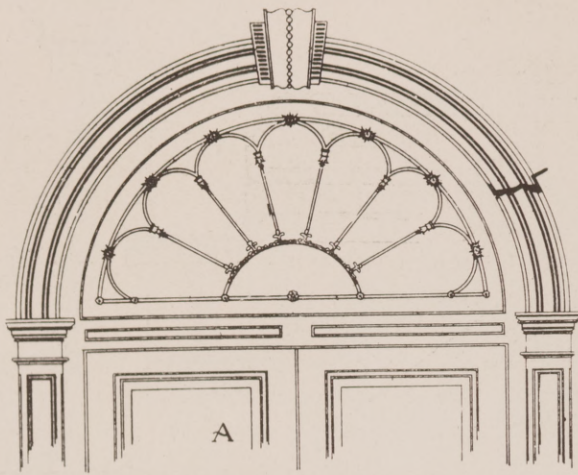
HOUSE OF MRS. RYBURN G. CLAY, ATLANTA, GA.

PRINGLE & SMITH, ARCHITECTS.



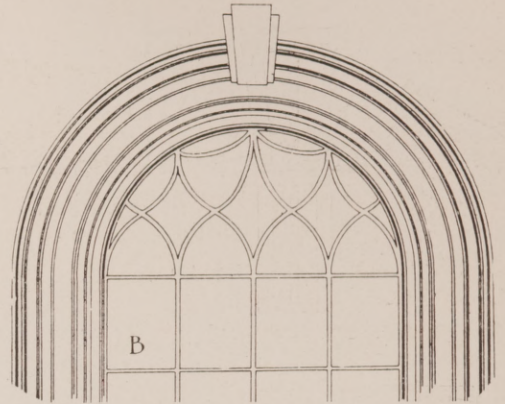
Detail of Entrance Main Building "Woodlawn," Va.

After measured drawings by E.W. Donn Jr.

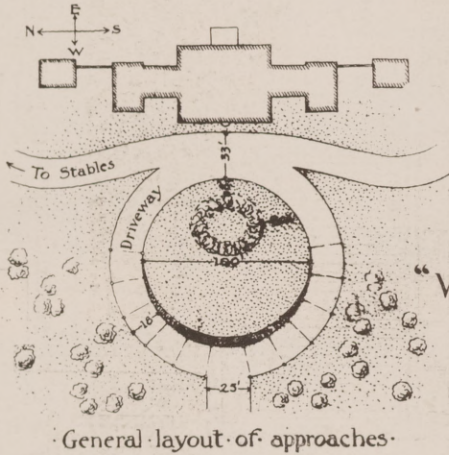


Entrance Door [Inside]

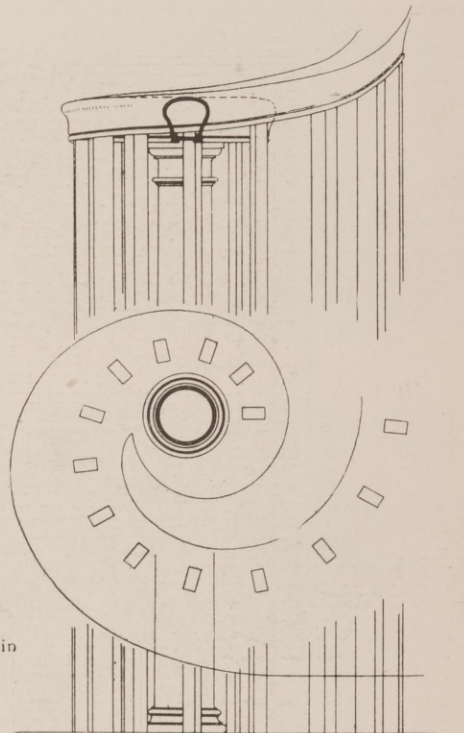
Scale for A & B 12 in 0 1 2 3 Feet



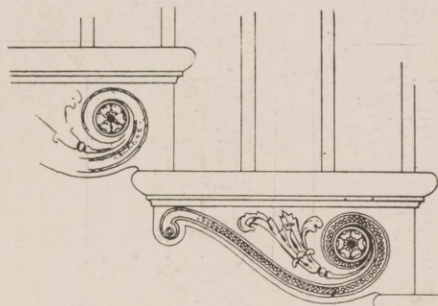
Hall Window [2nd story]



General layout of approaches



“Woodlawn” Va.



Detail of Stairs Scale 0 1 2 3 4 5 6 7 8 9 10 11 12 in



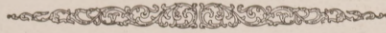
Section of Door Jamb

J.C.H.

After measured drawings by E.W. Donn Jr.

Southern Architectural Heirlooms

1817-1850



THE plantation houses and the early city houses of the South built during the first quarter of the last century and up until the time when the Civil war put a stop to building undertakings might be said to be a "blend" of Greek and Free-Classic (Roman) form, which finally crystallized into a formula, and which some writer has said, "Because of their landscape, setting and their surroundings, the adjectives 'elegant' and 'lordly' are not at all inapplicable." These houses do reflect the beauty and charm of a day that we know only by tradition, and it must be remembered that they were the work of honest and sincere, though unskilled, workmen and that the inspiration for the greater majority of these houses came from true types of the order, designed by architects in this country who were as sincere in their work and study as are our most fashionable architects of the day. The fact that these houses are the work of nameless men should add to their interest and remind the architect

of today that in the course of time his name will no doubt not be associated with some good and delicate piece of work that might endure through the ages.

Of the classic types illustrated on the following pages none is lovelier than Oaklawn, near Franklin, La. Its beautiful pediment and Doric columns suggest the temples of ancient Greece. This old house was built in 1817 by Judge Alexander Porter, a wealthy sugar planter. In

the heyday of its glory Oaklawn, like many other of the early mansions, was a show place of the state and community. It is set in a grove of oaks grown hoary with age, and once there was a beautiful rose garden, which was characteristic of the antebellum estates, beyond the iron fence, but this has passed away with the years. The doors and windows are beautifully proportioned, and the iron railing of the balcony adds a charming decorative note.

Perhaps Natchez, Mississippi, can boast of as many interesting old houses as any city in

(Continued on page 83)



TYPICAL EXAMPLE EARLY COLONIAL HOUSES, MILLEDGEVILLE, GA.



"FISH HOME," NATCHEZ, MISS. (1830)



LATHMORE HOUSE, SAVANNAH, GA. (1830)



OLD GOVERNOR'S MANSION, MILLEDGEVILLE, GA.



"DEVEREAUX," NATCHEZ, MISS. (1830)



"OAKLAWN," FRANKLIN, LA. (1817)



"SPRINGFIELD," NEAR NATCHEZ, MISS. (1820)

Romanesque Architecture in Italy

THE year 799 A.D. marks the passing of the Roman Empire as such, for it is the date of the election of the first Frankish king, Charlemagne. The fifteen years that followed were filled with a revival of building and it is to the credit of Charlemagne that in a great measure he restored the arts and civilization to western Europe.

The year 1000 A.D. was popularly supposed to mark the end of the world and little building was done during the half-century that preceded it. After the passing of the millennium, buildings sprang up in all parts of Europe, each country transforming the accepted forms in general design and detail, and adding new materials. A ready use of the material at hand characterizes the style in each country.

The Christian Church was both the civilizing and educating agency of the period and made a

constant effort to extend its powers in northern Europe. Charlemagne encouraged the growth of monastic communities and the erection of a church was often the foundation of a city. The Papacy rose to great power and controlled all civic government.

East and West drifted apart and their architecture progressed along different lines. The various European countries looked to Rome until each developed its own style. Science and art were monopolized by religious bodies. Monasteries, with schools attached, functioned as universities and the bishops and abbots were military chiefs. Until the formation of Gothic art about 1200 A.D., the history of architecture in Europe is the history of religion.

The term Romanesque includes all those phases of western European architecture based on Roman art from the time of the departure of



Photograph from Thos. C. Machen, Architect, Balto., Md.

The Palermo Cathedral in Sicily, although possessing no dignity of outline or grace of form, is more richly ornamented with intersecting arches and mosaic decorations externally than almost any other church of its class. The decorations, moreover, follow its construction. The effect is pretty, however, rather than grand.

Editorial Note—For this article we are indebted to "Through the Ages," a publication put out by the National Association of Marble Dealers.



Photograph from Thos. C. Machen, Architect, Balto., Md.

Details of the central doorway of the Pisa Cathedral. This structure is entirely of marble. The plan is that of a Latin cross, with deep transepts, with aisles on both sides of them



Photograph from Thos. C. Machen, Architect, Balto., Md.

The Basilica of St. Pietro at Toscanella. The exterior has been altered since its erection about 739 A.D. The architect was Rodpert. The two side doors are Romanesque, but the central door and the two two-light windows were probably inserted in the thirteenth century. The rose window looks like the work of early Renaissance set in an earlier framework.

the Romans up to the introduction of the pointed arch, or roughly from 500 A.D. to 1200 A.D. The name Romanesque itself is apt to prove very confusing unless we remember that each school of architecture of this period, although expressive of the peculiar genius that produced it, is bound by a common root, namely, the architecture of the Romans.

Romanesque architecture is confined more so than any other style, to ecclesiastical structures. It expresses not only the natural and religious feelings of the people, but the common ideals of the whole people. It is invested with a freshness too often lacking in many modern works. The variations in plan, in heights of columns and arches, may be attributed to inaccuracies of measurement or deliberate design. In either case, the result is an animate quality, a sense of motion and picturesqueness, that enlivens and banishes monotony.

After the churches of Rome and Byzantium split upon differences over the ritual and creed, the divergence between the architecture of the western and eastern church became greater still. The eastern Orthodox church never departed

from the Byzantine models. We see it today in Greece, Asia Minor and Russia. The western church has always looked to Rome for her earliest inspirations.

In Rome, where the basilicas were on hand to serve as models and where on all sides were to be found classic temples, with their profusion of choice columns and marble wall-linings, the basilican churches were the natural outcome. Outside of Rome, where materials were scarcer and greater architecture originality was required, other conditions prevailed. The low wooden roof of the basilica had to be replaced by a more enduring form of vaulted construction.

There developed in Italy then, three distinct styles of Romanesque architecture: the Early Christian, The Lombard and the Tuscan, or Pisan. Some authorities, such as Dr. Hamlin, of Columbia, recognize in addition two others: the Italo-Byzantine and the Sicilo-Arabie, in Sicily.

The Lombard style, as implied by the name, flourished chiefly in the cities of the Lombardy Plain, in the north of Italy. Good examples are found in the cities of Milan, Bologna, Piacenza, Verona and Pavia. The facade was simple in

composition, with a wide expanse of plain surface, broken at intervals by a series of arcades filled in with slender arches and columns. Colonnettes or long pilasters, blind arcades and open arcaded galleries under the eaves were effective in giving lights and shadows to these exteriors. The front was often divided into three parts, suggesting the basilican interior nave-and-aisle, by narrow flat or round pilasters. The basilican form otherwise disappeared, as far as the exterior was concerned; the vaulted roof was concealed by a simple low-pitched gable. A projecting porch adorned the doorway, and the columns of the portico rested upon the backs of crouching lions. The carving was often of an elaborate and grotesque nature. The facades were always solemn and dignified. Tennyson, after visiting the old cities of Lombardy during cloudy weather, wrote:

“Stern and sad (so rare the smiles
Of sunlight) look'd the Lombard piles;
Porch-pillars on the lion resting,
And sombre, old, colonnaded aisles.”

There was often a square campanile, or bell-tower, connected with the church. This was often treated with some variety of form and decoration. It was often adorned with long, narrow pilaster strips and an arcaded cornice, as at Piacenza. The plan was sometimes octagonal, with openings at the top three or four in number on each face. Nearly every important town of northern Italy possessing one or more examples of these structures dating from the eleventh, twelfth or thirteenth centuries.

Within, the basilican plan was changed by the introduction of the massive vaulted roof, requiring the width of the nave to be narrowed, and the substitution of sturdy piers carrying the pier arches for the rows of graceful columns. These piers were often of clustered section. A crypt, or shrine, was sometimes placed beneath the choir, and the choir floor raised a few steps above the general floor level.

The introduction of logic for tradition in planning the structural members is found for the first time. In these Lombard piers and vaults it is frankly applied. The vaulting was in square divisions or bays, made up of two pier arches meeting upon an intermediate lighter piers. The interior became changed entirely in appearance, and took on a severe and massive dignity that the future developed through centuries of progress. Examples of this style are seen in St. Am-



Photograph from Thos. C. Machen, Architect, Balto., Md.

The Cathedral at Piacenza, in Lombardy, is an example of late Romanesque or early Gothic. The nave is majestic with columns of enormous height. Although it has lofty arcades, the upper stories are not starved. The triforium stage is well developed. The plan is both parallel and transverse triapsidal.

broglio at Milan, St. Michele at Pavia. The Cathedral of Piacenza and St. Zeno at Verona.

The Tuscan style was lighter and more elegant than the Lombard. The ceilings were timber as in the basilican form, and the use of columns persisted. The facades were almost entirely covered with a lavish arrangement of wall-arcades and galleries, carried on flat pilasters, or sometimes in tiers of small arches on slender columns standing free of the wall, as in the celebrated group of buildings at Pisa. Occasionally, as at St. Miniato in Florence, the facades were divided into panels of dark and white marbles. The arcading was prevented from becoming monotonous by

varied treatment of the different tiers. The Leaning Tower at Pisa was an exception, for here the bands of arcades were of equal height from base to summit. Ruskin claimed for this strange monument the distinction that it was the ugliest building in the world. Certainly it is architecture's most famous freak. The question as to whether the lean was caused by settling or was included in the original design has never been satisfactorily settled, although that latter view seems borne out by the fact that there is a deviation towards the vertical in the upper stories compared with the slant of the lower stories. It has always served as a watch-tower rather than as a bell-tower, the usual purpose of a campanile.

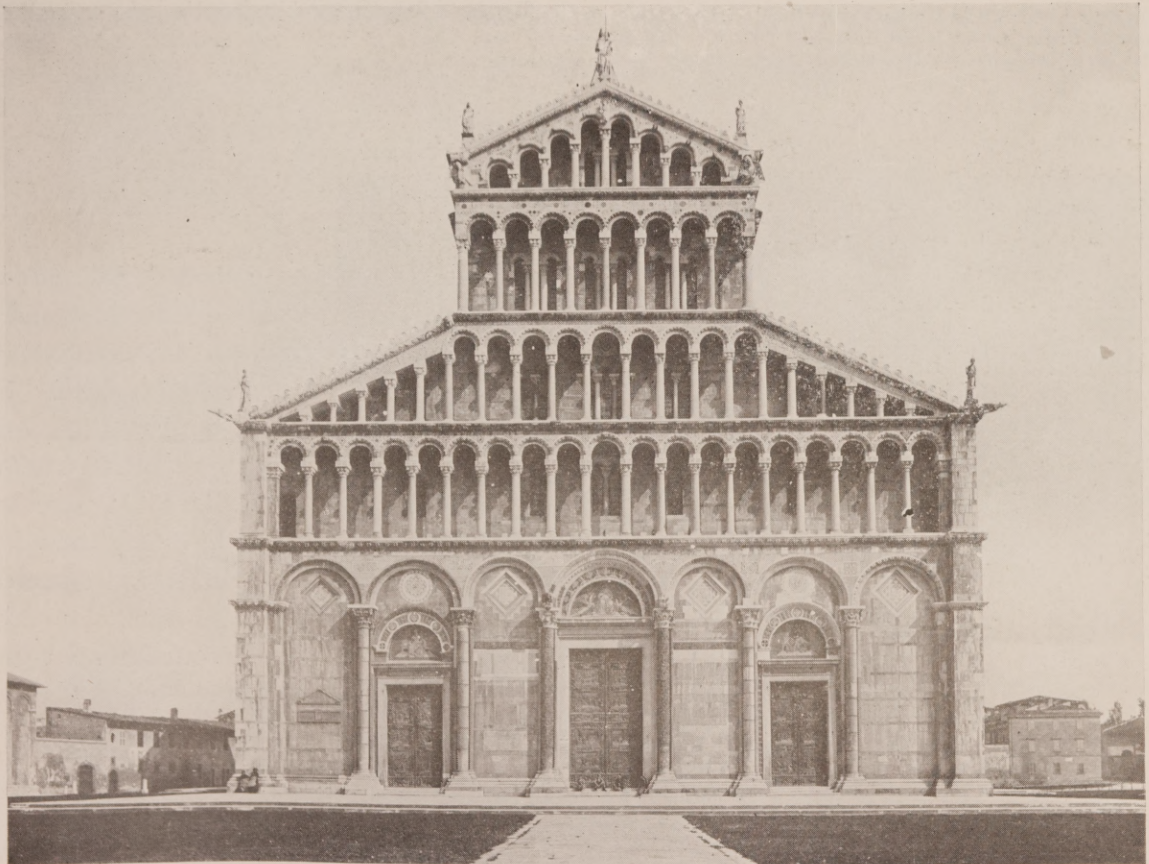
The cathedral at Pisa is five-aisled. Its exterior arcades vary in height and spacing. The roof is of wood and over the crossing is an egg-shaped dome curiously small for so large a nave. While the effect of the coloring and design of the exterior is pleasing, the interior is decorated with the typical bands of light and dark marble of such striking contrast as to shock rather than please it. The peculiar shape of the roof of the baptistery is due to a unique system of doming. The building was covered with a cone of masonry and there was sprung a segment of an annular vault

over the aisle from the cornice, or upper string-piece, to a point about two-thirds the way up the masonry cone. The resultant effect is superficially that of a dome. This building, indeed, belongs partly to the Gothic period.

Since Pisa maintained an extensive trade with Byzantium, the eastern methods of building and decoration influenced the Tuscan, and probably accounts for the use of the marble panelling so characteristic of Florentine architecture. Good examples of the Pisan style are found in Lucca in the churches of St. Martino and St. Michele; and in Pistoia, not far from Florence; in other parts of Italy also we meet with churches in which are blended the style of the Byzantine, the Lombard and the Tuscan.

The church of St. Miniato (1013-60), near Florence, shows a departure from the Pisan. The plan is that of a basilica with the nave divided by two transverse arches into three parts. The timber roof is richly painted and marbles decorate the walls. The exterior shows, instead of the horizontal bands of marble as used in the Pisan group, panelled veneering of black and white marbles, a combination of Pisan and Italo-Byzantine.

The rule of the Mohammedans in Sicily, which



Photograph from Thos. C. Machen, Architect, Balto., Md.

Front of the Pisa Cathedral. The architect was Boschetto, are said to be Greek and Roman antiques, spoils of war. Inlays of dark green marble are conspicuous.

a Greek of Delichium. Sixty-eight columns of the nave Some of the capitals are Corinthian, others Composite.



Photograph from Thos. C. Machen, Architect, Balto., Md.

Another view of the Cathedral at Pisa. This shows the Baptistery in the left background. A third member of the famous Pisan group is the Leaning Tower. The Baptistery was begun in 1153, the architect being Diotisalvi. The main walls are banded with Verde di Prato, like the Duomo.



Photograph from Thos. C. Machen, Architect, Balto., Md.

View of interior of the Cathedral at Monreale. The windows, though pointed, are undivided and not meant for painted glass. The plan is that of a Roman basilica.

began in A.D. 827, affected the island's architecture, and we find a mixture of Byzantine, Romanesque and Arabian. For instance, the beautiful cathedrals of Monreale (1175) and Palermo (1135) have the nave columns topped by finely carved Byzantine capitals and dosserets, and the roofs richly treated with color decoration after the manner of the Mohammedan interiors.

Business and Commercial Structures Feature the South's Greatest Building Year

By C. Armond Carroll.

THE most striking feature of the greatest building year that the South has ever known lies in the fact that a large percentage of total construction during 1923 has centered in business and commercial structures, hotels and apartment houses which conform to the most modern ideas in materials and equipment and have been planned on a scale that has never before been paralleled in this section of the country.

It is particularly impressive to note that these buildings have not been confined to those larger and, in the past, more progressive centers, such as Richmond, Atlanta, New Orleans, Memphis and Dallas; but the smaller cities throughout the entire territory have engaged during the year to a surprising degree in the erection of structures which in the immediate past have been both beyond the demand and the financial resources of these localities.

The improved financial status of the section since the war, the greatly augmented industrial and commercial business which is being devel-

oped at a surprising rate, and a broader outlook on life in general have conspired to create a demand for the more advanced types of buildings, in which all the comforts provided by the latest and most ingenious devices are combined with elegance and maturer architectural taste.

It is noteworthy, also, that the vast majority of these structures which are offering the most involved engineering and structural problems, are being evolved in southern architectural offices. Southern architects, who in the past have been restricted in their scope, have proved capable of meeting every problem which has arisen and have produced plans which combine the soundest technical knowledge with an artistic vision expressed in scores of commanding facades and delightful decorative details.

Shreveport, La., is in a case in point of what the smaller cities have been doing during the year in the way of major construction. Two buildings costing a million or over have been put

(Continued on page 69)



BUILDING FOR M. RICH & BROS. CO., ATLANTA, GA.
HENTZ, REID & ADLER, ARCHITECTS.



SECURITY BUILDING, MEMPHIS, TENN.
McKIM, MEAD & WHITE, ARCHITECTS.



• THE • NEW • ARLINGTON • HOTEL • MEMPHIS •
• JONES & FURBRINGER • ARCHITECTS •



HOTEL STATLER, ST. LOUIS, MO.

GEO. B. POST & SON, ARCHITECTS.

MAURAN, RUSSELL & CROWELL, ASSOCIATES.



HARRY NICHOLS BUILDING, NASHVILLE, TENN.

McKIM, MEAD & WHITE, ARCHITECTS, AND MARR & HOLMAN, ASSOCIATES.

PERSONAL MENTION

COMPETITION OF HOUSE BEAUTIFUL COVERS.

The success of the competition for cover designs held last year has led the House Beautiful to repeat this event, and again to offer two prizes, one of \$500 and one of \$250 to the successful contestants. The competition closes February 9, 1924. Full particulars may be had on application to the Competition Committee, House Beautiful, 8 Arlington Street, Boston, Mass.

Ralph W. Yardley, A. I. A., was among those recently licensed to practice architecture in Tennessee. He is supervising engineer in charge of the new Memphis Municipal Auditorium now under construction.

The Osborn Engineering Company, architects and engineers, have moved their offices from 2848 Prospect Avenue to Rooms 223-227 Euclid and Seventy-first Street Building, Cleveland, Ohio.

Announcement is made that Harry D. Hughes, architect, has recently opened an office for the practice of architecture in the Citizens Building, Cleveland, Ohio.

Rodier & Kundzin, architects, announce the opening of offices at 1216 Eighteenth Street, N. W., Connecticut Avenue at Jefferson Place, Washington, D. C.

A. Thomas Thorne, architect, has moved his office from the Cosden Building to 301 Roberts Building, Sixth and Main Streets, Tulsa, Okla., where he would be glad to receive manufacturers' new catalogs and samples.

D. O. Whildin, architect, announces the re-

moval of his office from Rooms 501-2, Title Guarantee Building to his new building at 515 North Twenty-first Street, Birmingham, Ala.

Wilson B. Parker, architect, has moved his office from 620 State Life Building to 507 Board of Trade Building, Indianapolis, Ind.

It is announced that N. W. Overstreet, architect, with offices in the Overstreet Building, Jackson, Miss., has taken into his organization C. M. Kimble. Mr. Kimble is a specialist in interior and exterior bank work. Manufacturers are requested to send catalogs and samples.

A. R. Feliciano, architect, formerly of Birmingham, Ala., announces the removal of his office to 33 North Ontario Street, Toledo, Ohio, where he would be pleased to receive manufacturers' catalogs and samples. Mr. Feliciano specializes in schools and ecclesiastical architecture.

The Building and Security Corporation, designers and builders, announce the opening of their offices at 918 East Main Street, Richmond, Va. Manufacturers' catalogs and samples are desired.

Announcement is made that William I. Deming, architect, has succeeded to the architectural firm of Donn & Deming, continuing the business at the same address, namely, 808 Seventeenth Street, Washington, D. C.

Chas. A. Smith, architect, successor to Smith, Rea & Lovitt, has moved his office from 602 to 800 Finance Building, Kansas City, Mo.

Delos H. Smith, architect, Washington, D. C., announces the removal of his office to 1707 I Street, Northwest.





TWELVE-STORY ELEVATED APARTMENT
270 WEST END AVE., NEW YORK CITY

J. AXELROD, PRESIDENT

GEO. F. PILHAM, ARCHITECT

POLLACK & O'NEILL, INC., PLUMBERS

**ALL SANITARY PORCELAIN WARE
MANUFACTURED AND FURNISHED**

BY

THE FORDS PORCELAIN WORKS, INC.
PERTH AMBOY, N. J.

GENERAL SALES OFFICE: 103 PARK AVE., NEW YORK CITY
GENERAL SALES MANAGER: EDWIN F. DISBROW

Floors of Quality

Asbestone Composition Flooring

"The floor you like to walk on"

THE ideal flooring for Schools and all classes of public and private buildings. Recognized by members of the Architectural Profession to be the best medium priced flooring known to modern science.

Durable

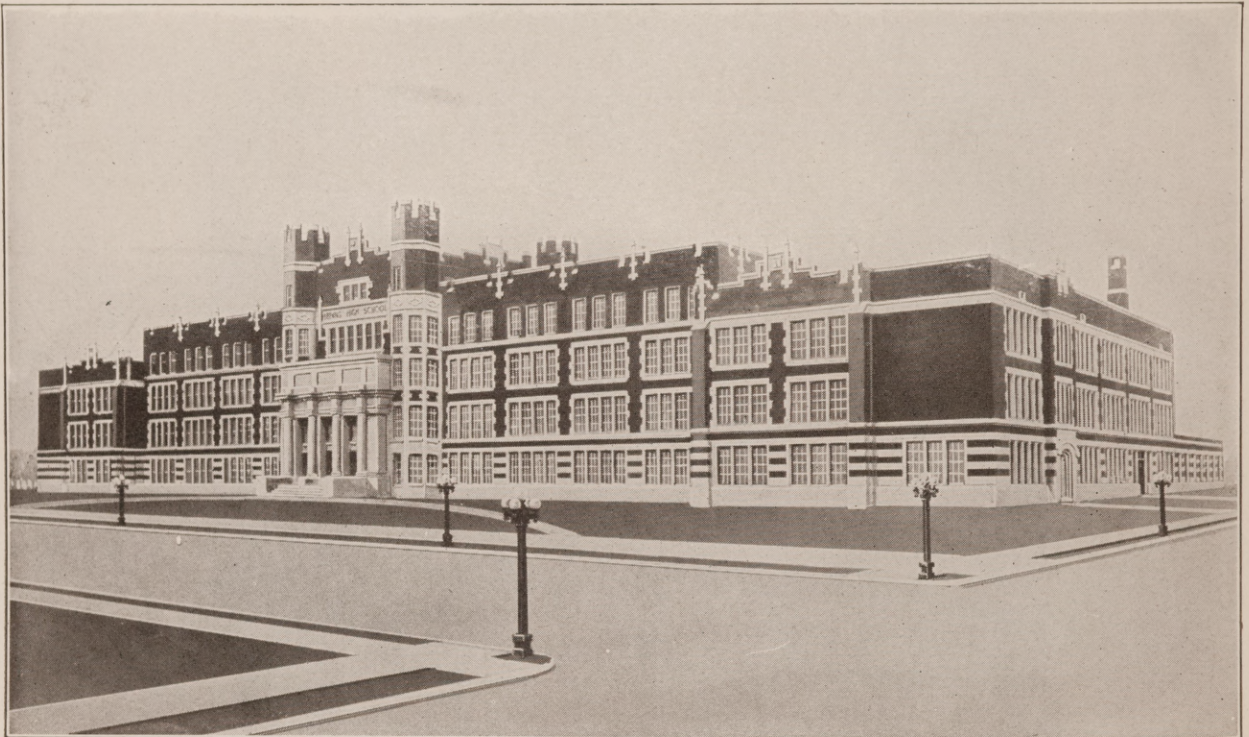
Hygienic

Fireproof

Resilient

Easy to the Tread

Installed in the Hibbing High School, Hibbing, Minn.
Second Largest High School in the U. S.



Hibbing High School, approximately 150,000 square feet

Also installed in:

St. Louis University, St. Louis, Mo.
Coleraine High School, Coleraine, Minn.
Waukegan High School, Waukegan, Ill.
Virginia High School, Virginia, Minn.
Victory Memorial School, Detroit, Mich.
Chisholm High School, Chisholm, Minn.
Mahomet High School, Mahomet, Ill.
Kewatin High School, Kewatin, Minn.
New Castle High School, New Castle, Pa.

Ward Grade School, Ranger, Tex.
Sandwich High School, Sandwich, Ill.
Christian College, Columbia, Ma.
Broadview Grade School, Garfield Hts., O.
Moberidge High School, Moberidge, S. D.
South High School, Youngstown, Ohio.
St. Anthony Grade School, Highland, Wis.
St. Thomas Grade School, Ft. Thomas, Ky.
Jacksonville High School, Jacksonville, Ill.

and many others too numerous to specify

Floors are the most used and abused portion of any building—therefore—

Specify ASBESTONE THE QUALITY FLOORING

All Installations Covered by Guarantee.

Installations MADE IN ALL PARTS OF THE WORLD

PRICES, SAMPLES and FULL PARTICULARS FREE ON APPLICATION

FRANKLYN R. MULLER, INC.

ESTABLISHED 1906

Sole Manufacturers

ASBESTONE FLOORING AND STUCCO

95 E. Madison St., Waukegan, Illinois



New Floor Design Reduces Load in Tall Steel Building

Increased Weight Due to Additional Stories Is Compensated by Adopting Floor Design of Lighter Weight.

A CHANGE to a lighter type of floor construction for a large partly-finished steel-frame building at Kansas City, Mo., has been made necessary by the decision to build additional stories and thus add to the weight to be carried by the structural work already erected. The steel frame for the 19-story Kansas City Athletic Club building was then stopped on account of financial difficulties. When the project was revived and financed recently, it was decided to complete the building substantially according to the original plans, but to increase the height to twenty-one stories and a roof garden.

To explain the re-design of the floors some description of the steel design is necessary. Steel trusses having their upper and lower chords in the eleventh and twelfth floors carry the east 56 ft. of the building (three panels) above the eleventh floor across the gymnasium. Similar but deeper trusses, their chords in the tenth and twelfth floors, carry the west 56 ft. of the building over the swimming pool. These latter trusses are located in the partitions between the handball courts. In the original design all the floors were to be of ribbed concrete slabs, and this construction is used up to and including the level of the bottom chords of the trusses in both ends of the building.

In checking the design to provide for two additional stories it was found that the columns would sustain the load due to floors of the original ribbed slab design in the new stories, but that the trusses would require reinforcement. In order to avoid such reinforcement, it was decided to use a lighter floor construction, consisting of

a 2½-in. reinforced slab carried on pressed-steel joists fitted between the original floor beams. Beginning this new floor design in the twelfth floor, the resultant reduction in dead load of the eight floors proved to be sufficient to compensate for the additional load of the twentieth and twenty-first floors. In this way the total load on the trusses was increased so slightly that no alterations in the steelwork were required. The original ribbed slab design is being adhered to for the main roof, the roof garden and the pent-house construction, as well as for the first eleven floors.

Typical panels are 19½ x 20¼ ft. and 19½ x 18 ft., with the new joists in the 19½-ft. spans and spaced 20 to 24 in. c. to c. according to the width of the panel. These are standard 10 in. pressed-steel joists, made of pairs of light pressed-steel channels set back to back and spot-welded together so as to form an I-section (see Engineering News-Record, Aug. 17, 1922, p. 269). Over the floor-beams and the joists is a 2½-in. concrete slab with a 1½-in. surface finish.

Special construction was required for the support of the new joists, since the original construction had no provision for such members. To attach brackets or shelf angles in the field, necessitating the drilling of rivet holes in all floor beams, would have been impracticable and would have resulted in additional weight. The plan adopted was to build the lower part of the concrete casing or fireproofing of the floor beams so as to form a shelf for the 10-in. joists, the ends of the joists being embedded in this casing, which is reinforced with wire-mesh fabric. This

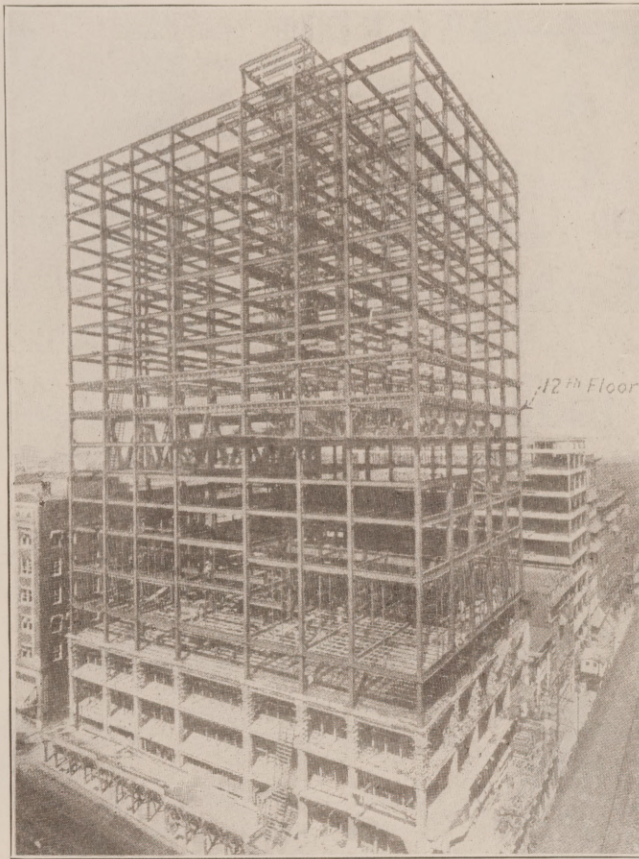


FIG. 1—KANSAS CITY ATHLETIC CLUB BUILDING

Two stories added to 19-story structure. Light floor construction used in upper floors. Steel trusses carry upper stories over open spaces.

Special construction was required for the support of the new joists, since the original construction had no provision for such members. To attach brackets or shelf angles in the field, necessitating the drilling of rivet holes in all floor beams, would have been impracticable and would have resulted in additional weight. The plan adopted was to build the lower part of the concrete casing or fireproofing of the floor beams so as to form a shelf for the 10-in. joists, the ends of the joists being embedded in this casing, which is reinforced with wire-mesh fabric. This

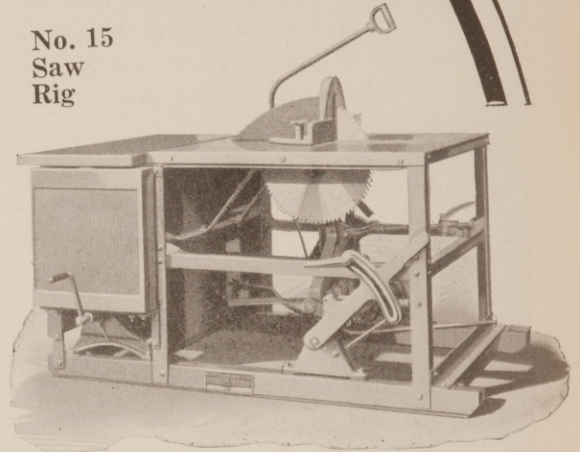
CH & E.

Saw Rigs—Pumps—
Hoists—Elevators—
Engines—Mortar
Mixers.

Send for Catalog
just off the press.

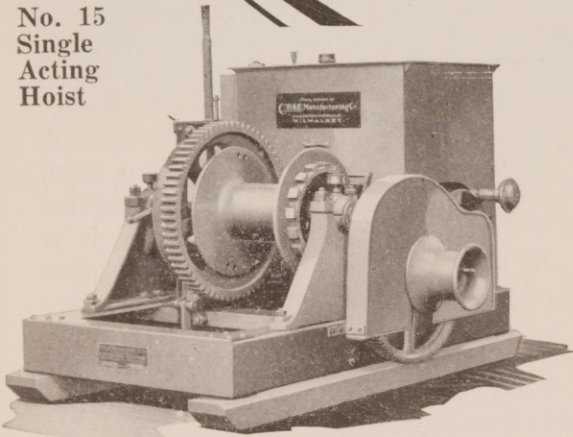
Do it today

No. 15
Saw
Rig



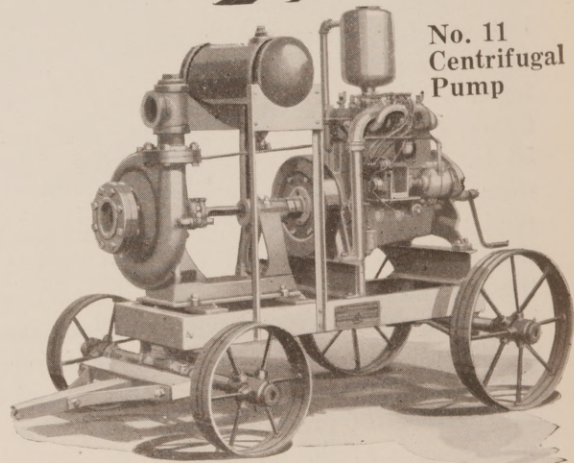
This outfit has a guaranteed ripping capacity of 6-inch lumber, also has a tilting cross cut saw.

No. 15
Single
Acting
Hoist



Note frame construction, also heavy gears and guards. Lifting capacity 2000 lbs. on single line. Fifteen horsepower, four-cylinder engine installed.

No. 11
Centrifugal
Pump



Will handle 30,000 gallons of water per hour at a thirty-five foot head.

Manufactured by

C. H. & E. Manufacturing Co., Inc.

324 Mineral St., MILWAUKEE, WIS.

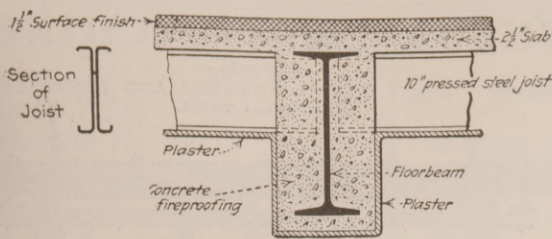


FIG. 2—LIGHT WEIGHT FLOOR CONSTRUCTION.

floor construction is shown in Fig. 2. Wood forms for the combined shelf and beam casing were suspended from the floor beams, as shown in Fig. 3. While this concrete was being placed the joists were supported by false work, which was kept in place for at least one day after the concrete was poured.

The relative fire resistance of the new type of floor, as compared with the heavier reinforced-concrete construction, in the event of a great conflagration, was taken into consideration in view of the fire in the Burlington Building at Chicago in March, 1922. But the owners of the Athletic Club Building considered the additional two stories to be of sufficient importance to justify the change in construction. For fireproofing the truss members a solid reinforced-concrete casing is to be applied.

Live-loads in general are 50 lbs. per square foot, but there are a few exceptions in special locations; a load of 40 lbs. was assumed for the roof,

75 lb. for the roof garden, 90 lb. for the main dining room, kitchen and gymnasium, and 300 lb. for the sidewalks. In addition to these live loads on floors an allowance of 20 lb. per square foot was made to provide for partitions.

For the original design as well as the present altered design of the building the architects were Hoyt, Prince & Barnes, of Kansas City. The Swenson Construction Co., also of Kansas City, is the general contractor. The original structural framing and its present additions were designed and erected by the Kansas City Structural Steel Co., but the pressed-steel joists were furnished by the Central Steel Co., Massillon, Ohio. The combined club and office building is now owned by the Continental Building Co.

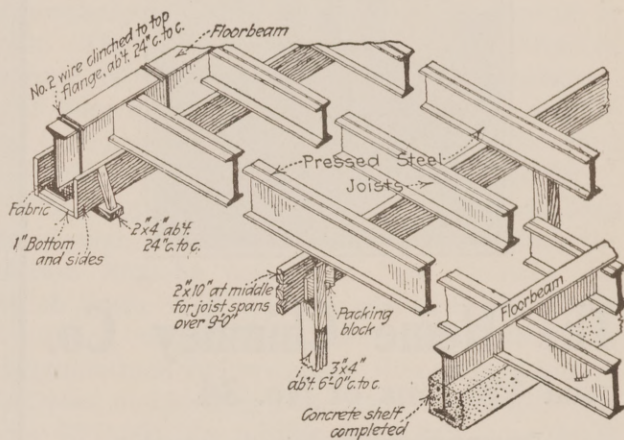


FIG. 3—CONCRETE SHELVES SUPPORT NEW JOISTS.

Business and Commercial Structures Feature the South's Greatest Building Year

By C. Armond Carroll

(Continued from page 59)

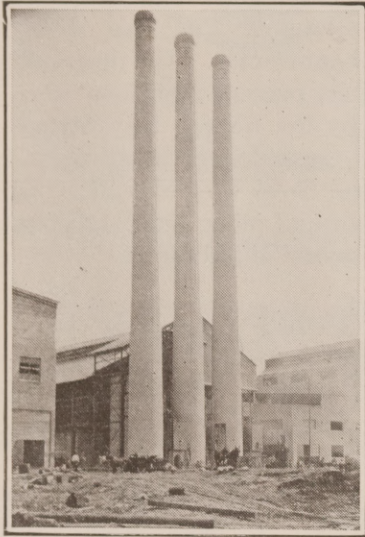
under way: the Washington Hotel, and the Slatery office building, a seventeen story structure which will house many of the city's commercial executives. Both of these buildings have been designed by the firm of Mann and Stern, architects, of Little Rock. In addition to these, Denis Ricou is expending \$300,000 upon a seven-story store and office building after plans by Joseph Finginer, of Houston, and Seymour Van Os, of Shreveport, associate. Edward F. Field has designed the new Elks' Lodge, of Shreveport, a seven story building costing approximately four hundred thousand dollars.

Of more than passing interest is the construction activity of Jackson, Miss., which in the past has had no imposing structures apart from the state buildings. 1923 has witnessed the beginning of two magnificent buildings, one a ho-

tel and the other an office building. The new Edwards House being erected by the Enochs Estate after plans by Nolan and Torre, of New Orleans, will be one of the most notable hostleries of the South. It is twelve stories in height, contains 424 rooms, and in every respect meets metropolitan hotel standards of construction and arrangement. The office building is being erected for the Lamar Life Insurance Company, after plans by Sanguinet, Staats and Hedrick, of Fort Worth, with N. W. Overstreet, of Jackson, associate. This will rise for ten stories and tower, and will cost \$560,000.

Several of the cities of North Carolina, none of which showed fifty thousand population during the last census, are particularly illustrative of progressive construction tendencies. Charlotte during the year has gained a great modern hotel,

For better Concrete -SLAG



The Heine Chimney Co.
used 450 tons of No. 34

"ENSLEY" & "ALA CITY"
BASIC SLAG
CRUSHED & SCREENED

in these chimneys

Illustration shows the three 202 ft. concrete chimneys just completed for the LeHigh Portland Cement Co. (Allentown, Pa.) at their sixteenth cement mill in Birmingham.

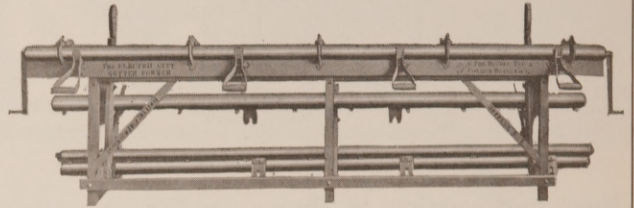
To withstand the varied strains to which these towering stacks were subjected it was necessary that the concrete possess the utmost in compression and tensile strength. For that reason No. 34 "Ensley Basic Slag" was used as the coarse aggregate.

Dwight P. Robinson Co. (Chicago) used 10,000 tons of our Basic Slag in the construction of the several concrete buildings at this plant. C. G. Kershaw Contracting Co. (B'ham) used many thousand of tons in constructing the concrete underpasses which lead from the cement mill under main line of L. & N. Ry. to the raw material deposits. Yes, this three million dollar Cement Mill is practically "slag built" throughout.

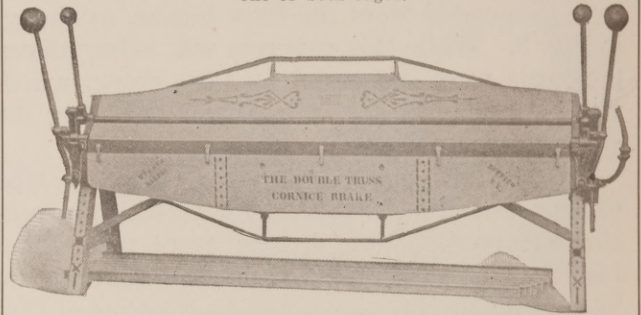
Birmingham Slag Company
Slag Headquarters for the South
ATLANTA BIRMINGHAM THOMASVILLE

THESE TWO MACHINES

are serving
ROOFERS, SHEET METAL WORKERS AND CONTRACTORS
all over the world.



THE ELECTRIC CITY GUTTER FORMER
Makes complete Half Round Gutter 3/4" to 12" with bead on either one or both edges.



THE DOUBLE TRUSS CORNICE BRAKE
Has stood the test for over a quarter century.

—Thousands in use—

Write for catalog and other particulars.

Forming Machine Corporation

Successors to
DOUBLE TRUSS CORNICE BRAKE COMPANY
W. B. Topp, Annandale, Sydney, Australia—Agent for
Australia and New Zealand.

SALES AGENTS: There is some splendid territory still available in the United States and Canada. Write for full particulars.

Flush Valve Durability

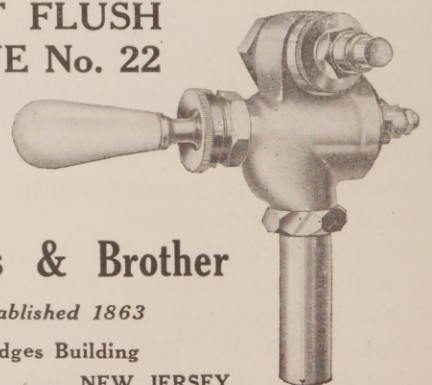
Simplicity of construction and easy action as well as length of service give Pilot Flush Valves distinction.

Over 100,000 installations in New York City, and still going strong. Many valves in operation over twelve years' continuous service give evidence of satisfaction and durability.

Our No. 22 Pilot Flush Valve is a valve sought by the discriminating builders for service and satisfaction, direct thrust by oscillating handle operates the leather diaphragm and eliminates all wear on working parts.

We invite your inquiries

**PILOT FLUSH
VALVE No. 22**



Hedges & Brother

Established 1863

Hedges Building

NEWARK

NEW JERSEY

a department store conforming to Fifth Avenue standards and a giant office building. The store is being built for J. B. Ivey and Company, after plans by W. H. Peeps, at a cost of \$440,000. The hotel, built for the Citizens Hotel Company, has fourteen stories and 250 rooms, and cost three quarters of a million. The architect is W. L. Stoddard, of New York, who also has prepared plans for the sixteen-story office building for the Anchor Mills.

Greensboro has recently finished a notable monument to its commercial and financial prosperity in the seventeen story Jefferson Life building, a structure covering an entire square and costing two millions. The Cone Export and Commission Company are now erecting a very handsome suite of offices at a cost of \$200,000, the building being two stories in height. Harry Barton drew the plans.

Asheville as a resort center has naturally been busy in the erection of new hotels, the new Battery Park, which replaces the famous old structure of the same name, and the George Vanderbilt, each of which cost approximately a million dollars, being notable examples. W. L. Stoddard is architect of both projects. In addition, the city is to have an exceptionally graceful example of the tower type of office building, the Jackson Building, after plans by Ronald Greene.

In the larger centers of the South, practically every city has reported a banner building year. Structures ranging in cost from half a million to six million have been the order of the day, some of these being exceptionally handsome and complete in every detail, setting new standards for Southern business and social life.

Perhaps the greatest of these is the Atlanta Biltmore Hotel, the newest of the famous and palatial chain of hotels which the Bowman interests are operating in New York, Los Angeles, Havana and other leading centers of travel. This mighty pile, rising twelve stories in height and encircling an exceptionally large city block, has 560 guest rooms in the main hotel building, in addition to scores of private housekeeping apartments in other wings. It was designed by Schultze and Weaver, of New York, and is typical of the elegance and comfort which grace the finest of New York hotels. The financial outlay involved is \$6,000,000.

With the new Tri-State Hotel, of Memphis, not yet completed (this giving Memphis 345 additional rooms for its transient guests), plans have already been drawn by Walter W. Auschlager, Inc., for another and even larger hostelry for the city, the new Peabody. This building will have 615 guest rooms, each with bath, in addition to forty-five shops on the ground floor. The cost will be approximately five millions.

Florida is teeming with hotel construction. Miami and Miami Beach each has had several buildings of this type to augment their facilities and answer the growing demand of winter tourists. The Hotel Nautilus, at the beach, is a magnificent example of this new development. It is being built at a cost of a million and a half from plans drawn by Schultze and Weaver. On the West Coast, also, progress along this line is rapid. The new million dollar hotel Soreno, of St. Petersburg, planned by G. Lloyd Preacher and Company, of Atlanta, is a case in point.

New department store construction is everywhere noted. These buildings have got away entirely from the old conception of store architecture which formerly prevailed. They breathe an atmosphere of Fifth Avenue and the Rue de la Paix. The million and a quarter Rich store in Atlanta, is typical. Designed along the most recent lines by Hentz, Reid and Adler, it typifies the taste and affluence of the new clientele which partonizes the larger Southern shops of today.

The Ivey store at Charlotte has already been mentioned. Other similar structures include the Maison Blanche annex, at New Orleans, for which Emile Weil drew the plans, which call for a building costing over a quarter of a million; the Higginbotham-Bailey-Logan Company addition at Dalas, designed by Lang and Winchell, to cost over \$300,000; the million and a half store for B. Lowenstein and Company, at Memphis; and so on down the list of Southern cities, a majority of which chronicle some new and imposing shopping center.

Consistently throughout the territory, office structures have been rising during the year. These, in the last analysis, give the story of the section's increasing commercial life and the ever expanding business which calls for additional housing in buildings of the finest type.

The beautiful building for the Richmond Trust Company, of Richmond, is one of the choice designs of the year. Planned by Graham, Anderson, Probst and White, it combines in excellent fashion an artistry and an engineering efficiency that is indicative of recent construction of this type south of the Mason and Dixon Line. It is paralleled by the handsome million dollar home of the Life Insurance Company of Virginia, of which Clinton and Russell are the architects.

Nashville has the superb Harry Nichols Building, an office structure of ten stories, designed by McKim, Mead and White. This is one of the gems of Nashville's great building year, which includes the magnificent memorial and capitol annex; several fine buildings for Vanderbilt University, apartments and smaller business structures.

The Security Building, of Memphis, is also a



Porch addition to remodeled home of Mr. Murphy, Evanston, Ill.
Childs & Smith, Architects.

COLUMNS are an architectural feature of the building. Koll's Columns are the natural choice because they are architecturally correct from cap to base. They are columns of permanence, made of carefully selected wood with closely knit interlocking joints which prevent them from coming apart. Sizes range from 6 to 48 inches in diameter. Either plain or fluted. Send 20c in stamp for catalog S-47, which shows the wide adaptability of Koll's Columns.

HARTMANN-SANDERS COMPANY

Main Office and Factory Eastern Office and Showrooms
2155-87 Elston Ave., Chicago 6 East 39th St., New York
Originators and Sole Manufacturers Koll's Patent Lock Joint Columns
Manufacturers of Colonial Entrances, Pilaster and Porch Materials.



Koll's Lock-Joint Wood Columns

*Originally
made for the founders
of our country*

Governor Winthrop Desk

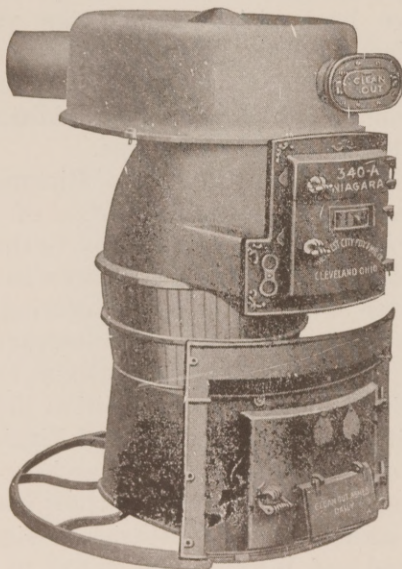
Who is there among those who really appreciate fine furniture, that does not admire the beauty and Colonial dignity of a Governor Winthrop desk? This correct copy of the old original piece is custom built of selected genuine mahogany by skilled cabinet makers. It has a hand rubbed finish, dust proof drawers, two secret drawers and solid brass fittings. There is nothing finer made. We guarantee it as represented or money will be refunded. Sent on receipt of price or C. O. D. with \$20 deposit. Plates of other antique reproductions on request. Ask for Booklet S-10.

38 inches long, 20 inches deep, 42 inches wide.

This is our feature piece especially priced. **\$105** carefully boxed for shipment, safe delivery.

WINTHROP FURNITURE COMPANY
185 Devonshire Street Boston, Massachusetts

NIAGARA FURNACES



Durable, Efficient
and Economical

Made of Clean high grade pig iron

A profitable proposition
for Dealers and users

Made by

The Forest City Foundry & Mfg. Co.

1220 Main Avenue

Cleveland, Ohio

We are also makers of the Monarch Furnace

beautiful example of office building design. Plans were prepared for this twelve story building by McKim, Mead and White. A building similar in size and cost is the Memphis Cotton Exchange, Mahan and Broadwell, architects. The third of Memphis's office structures of 1923 is the twenty-two story Columbian Mutual Life Assurance Building, designed by Boyer and Baum, which involves an expenditure of over a million.

Numerous Texas cities have been busy relieving the rapidly increasing demand for business housing. Dallas, in addition to a number of smaller structures, is beginning the first units of a five million dollar office building and warehouse development. Houston has the new Cotton Exchange, sixteen stories, costing \$900,000, after plans by Saguiet, Staats and Hedrick; and the State National Bank Building, \$500,000, for which Alfred C. Finn was the architect. The handsome home of the Texas State Bank and Trust Company, at Galveston, of which Alfred C. Blossom is the architect, involves an outlay of

a million dollars to complete this exceptionally complete eleven-story building.

This has been an unusually busy year for Atlanta in providing office buildings. Already famous for the number of such structures, it witnessed the erection of half a dozen more, including the seventeen story Hurt Building annex, of which Hugh Tallant is architect; the Glenn Building, Waddy B. Wood, architect; the 101 Marietta Street building, Birge and Stevens, architects; and Bona Allen building, all over ten stories in height.

This is but a cursory glance at some of the conspicuous examples of southern building for the year. It does not claim to be complete or comprehensive. It is merely indicative, in a way, of what is going on throughout the South in practically every city of any size; and goes to explain somewhat how it is that the sixteen Southern States are expending approximately three quarters of a billion in new construction for the year.

Layout for Hotel Kitchen Equipment

HIGHLY specialized kitchen construction and equipment, such as is demanded by the more elaborate hotels, apartments and public institutions of the South in recent years, has offered the designing architect problems with which he is not always familiar. For the successful solution of these problems, it has often been necessary to expend considerable time and research in order to arrive at the correct planning of this most important service department of the newer structures.

The most pretentious hotels, designed to accommodate hundreds of guests, with dining room capacities equal to the room capacity, and with numerous private rooms and banquet halls served from a central kitchen, require not only ample space, but the most careful and scientifically arrived at disposition of this space into efficiently arranged rooms. The ranges and steam kettles are the heart of the culinary department, but before food is ready for cooking, it must be prepared; and after it is cooked, it must be properly disposed to await service. In a large institution, where numerous chefs are employed and scores of helpers and waiters are to be considered, the question of orderly system is as vital as in a manufacturing plant.

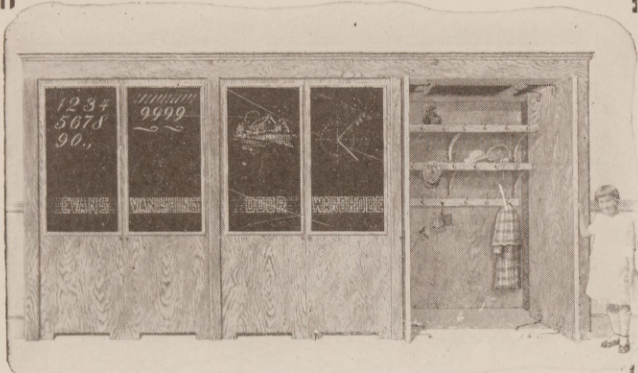
The Wright Company, of Atlanta, one of the leading kitchen and dining room equipment houses in the country, has perfected a planning

service for the aid of the architect which is being used to great advantage by a number of the principal designers of hotels in the South. The company, of course, is primarily interested in kitchen equipment, and has made the most extensive investigation of kitchen and pantry arrangement throughout the country, in addition to creating ideas to promote kitchen efficiency through correct placement of equipment.

In a special planning department, it maintains engineers and draughtsmen whose special business it is to prepare designs for complete cooking and serving layouts. Taking the architect's wall plans of the space allotted to the culinary department of a given structure, these engineers subdivide the space into main kitchen, short order kitchen, bakery, preparation rooms, refrigerating rooms, storage rooms, pantries, serving rooms, and similar divisions.

Each of these is so placed that it will allow the easiest and most orderly working of the raw materials through the various cooking and serving processes until the food is passed into the dining rooms. Every piece of equipment is located on the floor plans in the same practical manner. Ranges, steam tables, sinks, dish washers, bake ovens, refrigerators, coffee urns, ice cream freezers, salad preparation tables and various other items are allotted a particular place where they can be reached most effectively.

**An EVANS VANISHING DOOR Product
FOR SCHOOLS**



That Pays for Itself With
FLOOR SPACE SAVED

WARDROBES, Class E

have Laminated Backs, Ends and Divisions, and with Evans Process Hollow Sanitary Doors, hung on double pivoted arms, without guides, tracks or rollers, swing easily and silently. They cannot stick or bind. Made with or without Blackboards. Hardware can also be purchased separately.

More than a Million hang up their wraps in Evans Vanishing Door Wardrobes.

Trade Mark
VANISHING DOOR
U. S. Reg.

Catalog
"PICTURES THAT TALK"
Sent on Request.

W. L. EVANS

700 Block H

Washington, Ind.

Use the Attic but save

**The Stairway
Space**



—for you can easily do that if you use a **BESSLER Movable Stairway**

SO easy to operate it you need only the pull of a finger; so fully guaranteed for satisfaction we'll give you your money back without question if the test of a week or ten days doesn't please you.

It costs less than the stationary stairway; it takes up no space in the room below when not in use; it makes you \$1,000.00 by increasing your house value just that much.

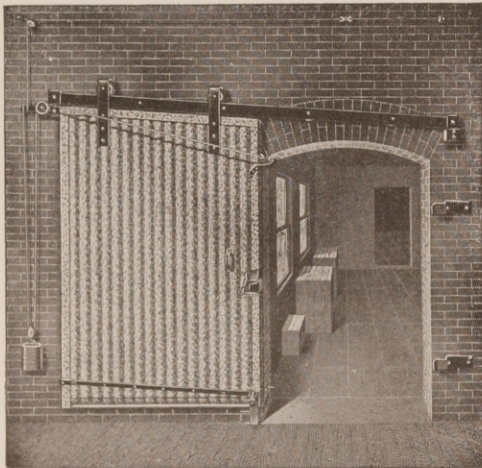
Ask Your Lumber Dealer About It!

Write for Our Booklet "The Modern Way Up"

The BESSLER Movable Stairway Co.

General Offices, 1906 E. Market St., Akron, O.
New York Offices—103 Park Ave.

**M & E "ALMETL"
FIRE DOORS & SHUTTERS**



are fully approved by the Underwriters Laboratories; the Associated Factory Mutual Laboratories; the Southeastern Underwriters' Association, and recommended by Fire Prevention Authorities.

They are built along the lines of correct engineering principles and embody every known feature for effective resistance against fire. Their construction is entirely of non-combustible materials—so rigid and so sturdy they should easily last as long as the building itself. They are easy to operate and in all the best Fire Door investment procurable.

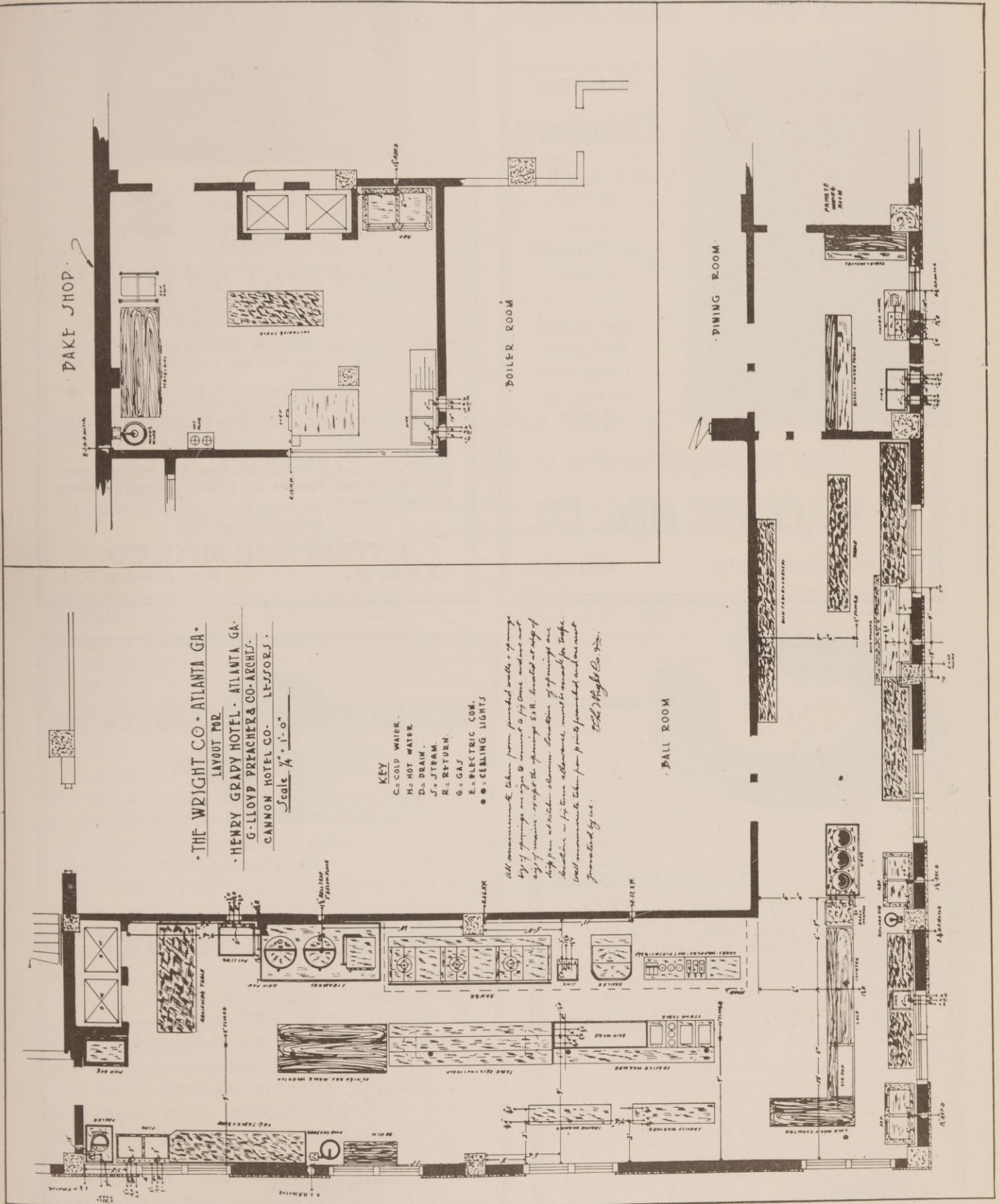


1866—MERCHANT & EVANS CO.—1923

PHILADELPHIA

CHICAGO, NEW YORK, KANSAS CITY, CLEVELAND, LANCASTER, PA., WHEELING

We have Contracting and Erecting Licensees Everywhere



Small Office Buildings

DIRECTORY	
ARKIN, R. E. 803-4	MC CARTY, E. F. 801
BOOGER, A. C. 803-4	MARSHALL, W. G. ATTY 388
BURDWIN, A. P. ATTY. 310	MARTIN, F. E. 388
CHALLENGER, W. A. ATTY. 308	POH. RYB. CO. LIT. BU 808
COLUMBIA FRANCE COOR 801	REPUBLIC ACCEPTANCE CORPORATION SUITE 801
EVANS GAS COAL CO. 803-4	ROSS, A. A. 801
EVANS, THOMAS E. 803-4	SMITH, CRAIG ATTY. 304
LAPPE, GEORGE J. 803-4	ZIMMERMAN, J. A. 803-4
LAWTON REAL ESTATE COMPANY SUITE 803-4	
LAWTON, W. S. 803-4	
LINDSAY, W. K. ATTY. 308	
LIT. BUREAU, POH. RYB. CO. 308	
LONG, R. C. ATTY. 318	
LUBIC BEN J. 808	

Can now be supplied with a

Directory

at a very low price.

NO UPKEEP COST

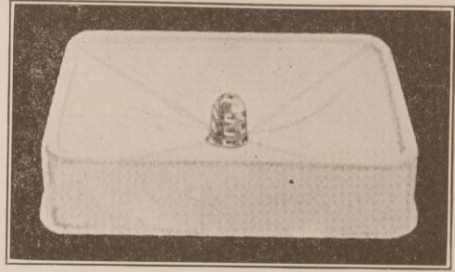
Ten Name Directory Complete as low as \$13.50

Write TODAY for Particulars.

R. W. CLARK MFG. CO.

1772 W. WILSON AVE.

CHICAGO



B and **S**

REFRIGERATOR DRIP PAN

It simply cannot overflow because of the high perforated strainer that will not clog even should dirt collect around sides.

Made in porcelain enameled pressed steel, and galvanized. All parts of pan slope to center. Can be set without tools when roughing is in. The strainer, tapped wide, compresses gasket against pipe and shoulder of pan.

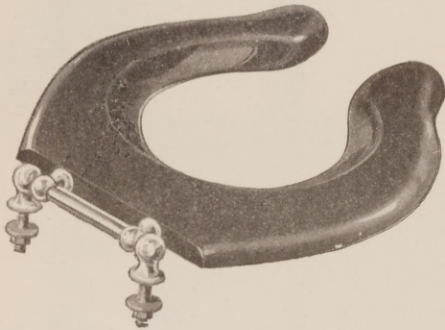
This PAN was formerly sold through a selling agency but is now being handled by Plumbing Supply Houses or direct from us.

Manufactured by

ENTERPRISE MFG. CO.

815 Syms St.,

West Hoboken, N. J.



The Luzerne Seat

For your better grade jobs you will make no mistake in using the "Luzerne" Seat of hard rubber. Being made without a joint of any kind and with a finish that is just as permanent as the seat itself, it is without equal for durability and appearance.

Made in a wide variety of types to fit any kind of a bowl. Ask your jobber or write us for prices.

THE LUZERNE RUBBER COMPANY
Manufacturers of Luzerne Hard Rubber Flush Valves.

Trenton, New Jersey
Chicago Office 564 W. Monroe Street



Quality
Finish
Durability
No Up-Keep

WALLER CROW, INC.



COUNSEL IN INDUSTRIAL
OPERATION & FINANCE

209 S. LaSalle St.,
CHICAGO

Non-Metallic Minerals

- | | |
|------------|------------------|
| Cements | Clays |
| Limes | Refractories |
| Magnesites | General Ceramics |
| Gypsums | Aggregates |
| Shales | Fullers Earth |
| | etc., etc. |

- Analyses
- Reports
- Plant Design
- Economic Counsel
- Construction Supervision

This specification of equipment is vital to the architect's plans, because only in this way can the proper plumbing plans be drawn up for the installation of piping and wiring during the actual period of construction. Gas ranges must have gas connections, as also the coffee urns, dishwashers and other gas heated equipment. Steam pipes must be laid to the steam kettles, steam tables, plate warmers, dish washers and other equipment that demands steam. Sinks and dishwashers must have water connections and sewage disposal. By placing all these items prior to construction, all pipes can be laid beneath the floor and in the walls without having to make any alterations after the building is completed and the equipment is ready for installation.

No service charge is rendered by the Wright Company for its planning service. It is put out

as a co-operative feature to show the good will of the company to architects and owners alike. No obligation is entailed to use Wright Company equipment in the building. In fact, it is said that only about fifty per cent of buildings which use Wright plans are Wright equipped.

The architect is furnished with a complete set of blue prints, drawn to scale and ready to be placed directly in the hands of the contractor, showing room divisions, equipment specifications and placement. Also, a set of blue prints is furnished for a plumbing plan, showing all gas, steam, water and sewerage connections.

Mr. Louis Wright, vice president of the firm, is head of the planning department. He is generally recognized as one of the leading authorities in America on kitchen design and equipment. All work is done under his personal direction.

Structural Lessons Learned from Survey of Steel-Frame Buildings After Japan's Earthquake

Wilbur S. Sample, Engineer for Fuller Co., Inspects and Reports on Condition of American-Built Structures in Tokyo—Recommends Design to Resist Shocks.

JAPAN'S earthquake of Sept. 1 failed to destroy—although it damaged slightly—the three large steel-frame office buildings which the George A. Fuller Co. of the Orient, a subsidiary of the New York firm of the same name, built in Tokyo a year or two ago. After the quake Wilbur S. Sample, engineer for the Fuller organization in Dairen, Manchuria, went to Tokyo and on Sept. 19 and 20, in company with Japanese architects and engineers, he inspected the N. Y. K., the Japan Oil and the Marunouchi buildings, all steel-frame structures seven to eight stories high. A thorough examination was made of the damage resulting from the earthquake, extending to every part of each building, from basement to roof inclusive, that could be seen without further demolition of standing work. The following report covers Mr. Sample's findings and recommendations for the first two buildings above named, a separate report on the Marunouchi building being substantially the same as the one below quoted. Additional data from the Marunouchi report are included in brackets. Otherwise the text below applies to all three structures:

Structural Steel—The Steel frame in every case seems to have been of sufficient strength to withstand the dead loads and the sudden application of any superimposed loads due to vibrations

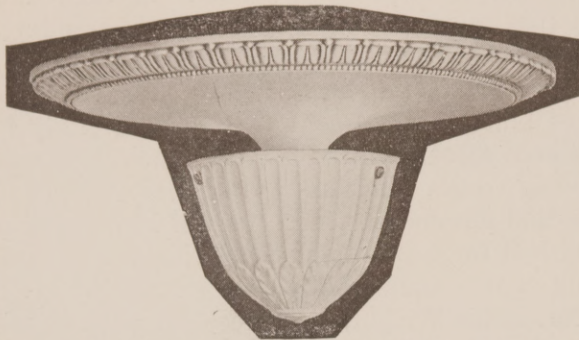
caused by the earthquake and also seems to have shown a sufficiently high elastic limit to have returned to its original position in every case. That there was undoubtedly a marked momentary deflection laterally in the columns is evidenced by the shattering of a large percentage of the masonry piers surrounding or enclosing the exterior wall columns and of the plastered partitions between the steel columns of the interior. While the momentary and violent deflection of the columns laterally, particularly in the second and third stories, was of sufficient strength to shatter the enclosing or contiguous masonry, the agitation was not sufficient permanently to distort the columns in any case.

[In the Marunouchi Building the report notes "the distortion or destruction of the steel cross bracings which were added to the structure after the earthquake of 1922."]

Reinforced Concrete—Except where the principal bays or sections of the parts of each building joined together, such as the front wings or the side wings, there was no evidence of any destruction or distortion of the reinforced-concrete floor slabs. At the joints between the front and side wings there were some minor cracks in the floor construction showing through the corridor floor surfacing, and indicating that the several sections of the building vibrated independently

PLANETLITE

"EVERY RAY OF PLANETLITE GIVES SERVICE"



PLANETLITE answers all requirements of modern Commercial lighting.

Architects specify them because PLANETLITES more than fulfill their requirements.

THE UNIT WITH THE 82% LIGHT OUTPUT.

Each unit is packed complete in cartons and "Shipped to the job ready to hang."

WRITE FOR PARTICULARS
DEPT. B



PLANETLITE CO., Inc.

342 Madison Avenue, New York

—Manufacturers—

A HOT WATER SERVICE

that is within reach of all

Wonderful, automatic gas water heater. Hot water on the instant at a saving of 50% of the usual cost.

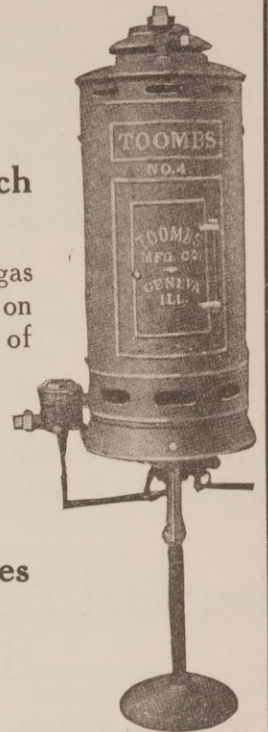
Plumbers!
Jobbers!

Write for prices and details.

Geneva Heater Sales Agency

262 W. 34th Street
New York City

Sole Distributors:
New York & New Jersey



A Granatex Apartment House



GRANATEX

Magnesite Stucco

Granatex Stucco has been purchased by leading builders' supply and lumber dealers during the past two years.

These firms are impressed by the policy of our company co-operating effectively with dealers, placing them in a position to better understand the successful methods used to market our product. The personnel of our company consists of men who have had over ten years practical experience in magnesite construction and application. The most modern methods of mixing are used. Our careful grading of aggregates insures greatest possible density. Our product is made of all pure minerals—nothing to become porous or pervious to the elements. When you are in the market for Magnesite Stucco let us demonstrate our real service to you.

Our Flooring Department is at your service and will cheerfully forward estimates for installing Granatile composition floors, base and stair treads of a material which is sanitary, resilient, fireproof, durable and economical.

NATIONAL MAGNESITE STUCCO CO.

Mills } River Rouge, Mich. General Office, Wyandotte, Mich.
Port Clinton, Ohio

GRANATILE

Flooring Composition

"INGALLS" FOR STEEL

STRUCTURAL STEEL AND ORNAMENTAL IRON WORK FOR BUILDINGS

The Ingalls Iron Works Co.
Executive Offices & Works
BIRMINGHAM, ALA.

BRANCH OFFICES

ATLANTA NEW ORLEANS DAYTONA, FLA.

AGENCIES

MEMPHIS CHARLOTTE JACKSONVILLE
TAMPA NASHVILLE

from each other, the cracks being undoubtedly due to a very severe shearing stress at these points.

Where gravel reinforced-concrete walls were used on the interior and on spandrel walls there was a minimum amount of damage.

[In the Marunouchi Building "there does not appear to be any marked or serious damage to the reinforced-concrete floor slabs or beam coverings. Where reinforced-concrete walls were used on the interior there was a minimum amount of damage except at certain points on stairway walls near the west side of the building. This damage was probably due to the lack of continuity of these walls in a straight line."]

Masonry Piers—In practically 90 per cent of the exterior piers of the second and third [and "fourth," in case of Marunouchi] stories there was evidence of a violent lateral motion or vibration of the entire structure; this extended to a slighter degree to the piers of the first story and of the fourth ["upper," in case of Marunouchi] story. Above the fourth story there appears more or less destruction of exterior masonry but not nearly so pronounced as in the lower stories.

There appears to be no particular kind of facing material outstanding as successfully resisting the crushing and distorting effects of the lateral movement. Architectural terra cotta, cut stone, granite, stucco and tiles showed varying degrees of stability in the order given, the most successful being the last named.

Interior partitions—The interior partitions in general are constructed of hollow clay tiles, metal lath on steel furring, concrete or reinforced concrete, all plastered on both sides. The hollow tile seems utterly unable to withstand the crushing effect of the lateral movement of columns, as evidenced by the crushing and falling of this class of partitions where the vibration was greatest or in the lower stories. In certain locations where metal lath partitions were used there was more or less damage but this damage was not nearly so pronounced as in the hollow clay tile partitions.

The concrete partitions behaved in a little better manner and the reinforced concrete partitions seemed to be the best of all, but there were some cases of a shattering of these by shearing horizontally along the center line of height, this occurring in partitions built of slag concrete.

Lighting Fixtures—The lighting fixtures in general were of brass canopies with opalescent glass globes, suspended from the ceilings by chain about 2 ft. long. The majority of the glass globes were destroyed by oscillating to such an extent as to strike the ceilings.

Marble Trim and Wainscoting—A portion of

the marble finish of walls and columns in the first story was dislodged and destroyed, but as this work was done in usually accepted manner there can be no thought of faulty workmanship.

In Conclusion.

After the San Francisco earthquake of 1906 I attended many meetings of architects and contractors held to discuss various building materials and methods of construction with a view of adopting such as seemed to be the best suited for stability. Practically all of the reconstruction work in that locality was based on designs and materials similar to or the same as those used in Tokyo in recent years, and I believe the Tokyo buildings constructed by your company would have withstood the shocks of an earthquake of the same degree of severity as the San Francisco earthquake, with a minimum amount of damage.

Now comes the Japan earthquake of 1923 with such unprecedented severity and such a tenacity of violence that it becomes necessary for us all to readjust our ideas of construction methods and to adopt such designs and take such precaution as in our belief will provide a greater measure of stability for future structures and a consequent added security for the lives of those occupying them.

With this thought in mind I beg leave to submit for your consideration the following recommendations as to the design of buildings to be erected in locations subject to earthquake shocks:

Recommendations.

Foundations—A close observation of the effects of the recent earthquake in Tokyo induces the belief that all foundations should be of friction piles capped with reinforced concrete, isolated pier spread footings, or a solid concrete mat without piles.

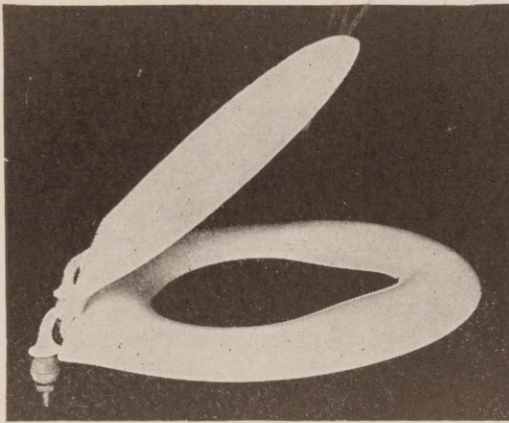
In the case of friction piles a number of test piles should be driven of different lengths and in several locations on the lot, each pile tested as to its bearing capacity and each foundation computed from the data thus obtained, allowing a safety factor of 6 or 7. In no case should the piles be driven to hardpan or to refusal. Each cluster of piles should be capped with reinforced concrete and these caps connected at the top in each direction with reinforced concrete struts.

In the case of isolated pier spread footings load tests should be taken in several parts of the lot at the proposed level of the footings and the size of each footing computed from the data thus obtained, allowing a safety factor of at least 5. These footings should be connected in each direction with reinforced-concrete struts.

In computing the loads to be carried by either the pile footings or the isolated pier spread footings only the actual dead-load of the structure

STURDY WHITE

not celluloid



The Sturdy products mark a distinct advance in the science of sanitation. The STURDY finish is MOULDED over shaped wood. It STAYS WHITE, is acid and alkali proof. Write for catalogue.

The Sturdy Manufacturing Co., Inc.

STROUDSBURG, PA.

"WRICO"

LETTERING GUIDES

You can now have
PERFECT LETTERING
on all your Maps and Drawings

THE "WRICO" LETTERING GUIDE is a simple and practical device by means of which anyone, without skill or practice, can do perfect lettering more easily and in less time than is required for ordinary freehand lettering.

Full particulars will be sent on request.

Send this Coupon

The Wood-Regan Instrument Co., Inc.

154 Nassau Street
New York City

Please send Circular giving full details of "WRICO" Lettering Guides.
Name
Address

The Wood-Regan Instrument Co., Inc., 154 Nassau St., New York City



Contractors and Builders

Can be assured of getting a fine, pure white and easy working finishing Hydrate, always uniform, by ordering

MONARCH

We guarantee every pound.

Write today for prices and information.

The National Lime & Stone Co.

Carey, Ohio



CONDUO BASE

PROVIDES a safe and concealed yet easily accessible raceway for both light and telephone wires in the modern office building.

ELIMINATES the unsightly exposed wires along walls and over door openings to meet tenant's electric outlet requirements.

HAS THE ENDORSEMENT of the leading Architects, Electricians and the Underwriters' Laboratories, Inc.

Write for further details.

The United Metal Products Co.
CANTON, OHIO

should be used. No live-load should be figured, or at the least only a very small percentage. Care should also be taken to have the bottoms of all footings at the same level, and deep basements should be avoided.

In the case of a solid concrete mat foundation the mat should be of sufficient thickness and figured for reinforcement to withstand the actual pressure on the ground as determined by computation of dead-loads, and should project sufficiently beyond the outside columns to avoid eccentric loading.

The foregoing recommendations are due to a belief that the soil underlying Tokyo will act as a sort of shock absorber as evidenced by the behavior of such buildings as Seiyukai Building, the Imperial Hotel, and the several other office buildings in Marunouchi. If the foundations or the piling under them are of such lengths as to reach solid strata then the full severity of the earthquake shock is transmitted through the foundations to the entire structure, while if the foundations rest on a soil of somewhat resilient nature the transmission of shock will be very much less.

Structural Steel—Columns should be placed in straight lines in each direction so that at every panel there will be a maximum number of points of resistance. The sections of columns should be as wide as possible in each direction and should be connected at each floor by girders as deep as the requirements for head room will permit. Both columns and girders should be latticed if the computation of stresses does not require solid web plates. If solid webs are required then the webs should be punched at frequent intervals to permit of the proper application of reinforcing steel as will be hereinafter discussed. Between the girders at each floor will be necessary steel beams for carrying the reinforced-concrete floor slabs.

In cases where head room or clear interior spaces are absolutely necessary then resort must be had to knee braces. It is recommended however that such rooms as absolutely require great height or clear interior be placed on the top story or as near thereto as possible. Rivets for connection of girders to columns should be in shear, wherever possible. Rivets in tension should be studiously avoided.

Reinforced Concrete—In all cases the specification for the mixture for reinforced concrete should be made after a study of the screen analysis of the coarse and fine aggregates available for use. No assurance of success can be had by the adoption of arbitrary proportions for the materials to be used. The water content should also be carefully considered and only a sufficient amount of water used to enable the practical working of the concrete into the forms.

Exterior piers around steel columns should be of reinforced concrete and as large as possible, extending from the frames of openings on each side and from the heads of window frames below to the sills of window frames above.

Interior columns and connecting girders should be entirely covered with concrete, thoroughly reinforced around and through the columns and longitudinally.

Build solid reinforced-concrete walls wherever possible between columns in the interior and also around such places as elevator shafts, stair wells, pipe shafts and vent shafts.

Wherever possible build solid reinforced-concrete walls from basement to roof and from outside to outside walls of building, leaving only such openings as are absolutely necessary for ingress and egress and reinforce the perimeters of such openings in a thorough manner.

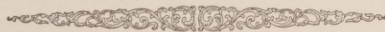
Exterior Facings—Avoid the use of brick or stone veneer if possible, using only stucco work or thin tiles. Forming the outlines of projecting cornices, belt courses, etc., as largely as possible in reinforced concrete.

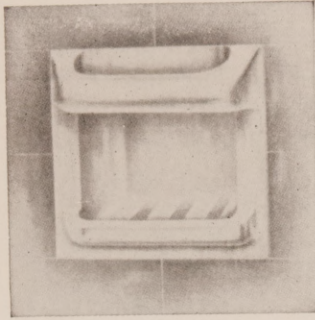
Partitions—If impracticable to use reinforced-concrete partitions the next best in the order named are metal lath on steel studs, solid brick, hollow brick, hollow clay tile. Reinforced concrete is, of course, recommended because of the additional stiffness thereby awarded to the structure as a whole, but if this seems to be impracticable then use metal lath.

Lighting Fixtures—Lighting fixtures should be either indirect system secured flat against the ceiling or should have stiff suspension.

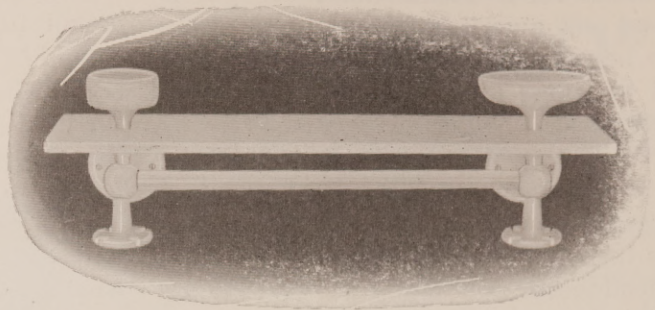
Marble—Use a minimum amount of marble slabs if the marble is to be attached to walls or columns.

Editor's Note.—For this interesting article we are indebted to "Engineering News Record."



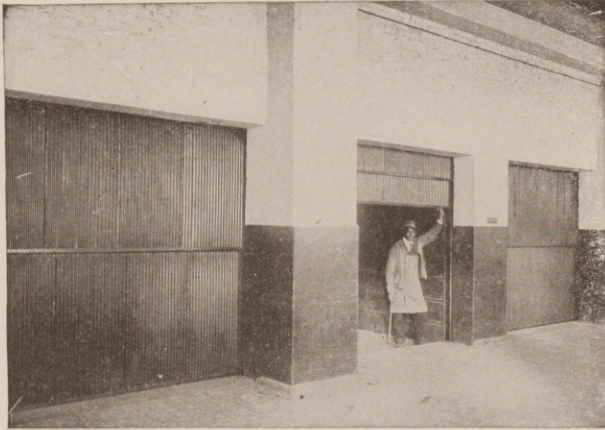


ALL WHITE
RIGHT
TRADE MARK



2 PROJECTING LINES AND A RECESS LINE

Our Fixtures are the finished Products of 12 years experience, exclusively devoted to the manufacture of Bath Room accessories, and manufactured under our own roof.
A trained organization striving for perfection. Send for catalogue.
BAY RIDGE SPECIALTIES CO., INC., 682-92 Stokes Ave., TRENTON, N. J.



ST. LOUIS FIRE DOOR CO.

General Offices and Factory:

1134-1142 SOUTH 6TH ST. ST. LOUIS, MO.
REPRESENTATIVES IN ALL LARGE CITIES
Manufacturers of Fire Doors and Patented

"WAL-EL-DOR" Vertical Telescoping Freight Elevator Door—Both halves slide up above Lintel out of the way inside of the shaft.

"CO-BAL-DOR" Counterbalanced Freight Elevator Door

"TI-CO-DOR" Tinclad Counterbalanced Freight Elevator Door

"FOLD-UP-DOR" Horizontal Folding Door for Warehouse—Shipping Platform, Freight House and Garage Openings.

All Doors Labeled, Inspected and Approved by

UNDERWRITERS LABORATORIES, Inc.

Write us for Catalog.

Jamestown Mortar Colors

Standard throughout
the U. S.

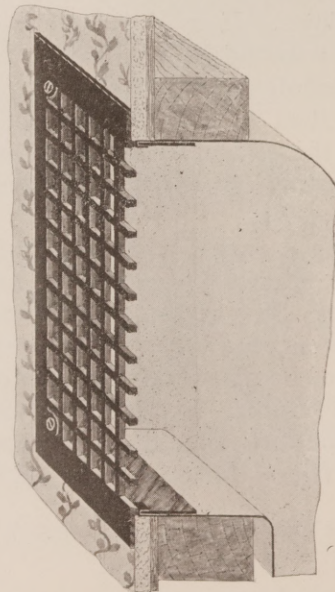
Mfg. in all shades.

Absolutely non Fading.

Write for Literature.

Jamestown
Paint & Varnish Company
Jamestown, Penna.

SOMETHING NEW



U. C. S. S. FRAMES

The most approved method of securing Grilles or Register faces to sheet metal ducts.

WM. HIGHTON & SONS CO.

Manufacturers of Registers, Grilles, Cast Bronze Memorial Tablets and Honor Rolls.

Factory and Home Office NASHUA, N. H.

Branch Offices
Boston New York Philadelphia
Baltimore Pittsburgh

WRITE FOR CATALOGUE AND LITERATURE

Southern Architectural Heirlooms

1817-1830

(Continued from page 49)

the South and we believe that "Springfield," built 1820, "Fish Home," built 1830 and "Deveraux" are among the finest examples of early Colonial houses in this state. The old governors Man-

sion at Milledgeville, Georgia, and the Lathmore House at Savannah are certainly as fine examples of old houses as can be found in the South.

Building Information

Contract for \$3,000,000 Hotel at Hot Springs.

Hot Springs, Ark.—General contract has been awarded to Ault & Burden, of Little Rock, by the Arlington Hotel Co., of this city, for the construction of the new \$3,000,000 resort hotel to be erected here. Upon its completion the new hotel is expected to rank among the finest structures of its kind in this country. The contract price for the building is \$2,100,000, while the furnishings will cost about \$500,000 and other facilities about \$400,000.

With a frontage of 400 feet, the hotel will be composed of three large sections, the central section to be ten stories and two side sections of seven stories. It will contain 500 rooms, bath house, roof garden and ball room and a 400-foot porch. Construction will be of stucco and tile, with polychrome friezes. Mann & Stern, of Little Rock, are the architects.

Officers of the Arlington Hotel Co. include D. F. Gaines, president, and W. E. Chester, vice president and general manager.

May Build \$1,000,000 Addition to Hotel.

Chattanooga, Tenn.—Plans are being considered by Sam R. Read for the erection of a 300-room addition to the Read House here, which is estimated will cost about \$1,000,000. It is stated that representatives of Holabird & Roche, architects of Chicago, will soon be in Chattanooga for the purpose of making necessary investigations prior to drawing plans for the addition.

If the erection of the proposed addition materializes, it is stated that two-thirds of the present building, fronting on West Ninth street, will be torn down as will a considerable portion on Broad street, in order to provide space for the new structure, which will be from 8 to 10 stories high.

Contract Awarded for \$350,000 Courthouse.

Sedalia, Mo.—Contract has been awarded to the Western Construction Co., of Des Moines, Ia., for the erection of the new Pettis County Courthouse here which will cost about \$350,000 with equipment. The building will replace the structure destroyed by fire in 1920, the contract price being \$285,000, which does not include the heating plant, plumbing and fixtures.

Dimensions of the new structure will be 100 by 136 feet, three stories. It will be of fireproof construction with concrete foundations. W. E. Hulse & Co., of Hutchinson, Kans., are the architects.

Contract Let for 8-Story Elks' Building.

Shreveport, La.—Contract has been awarded to the Stewart McGehee Construction Co., of Little Rock, Ark. and Batrou Rouge, La., at \$378,873, for the erection of the new eight-story annex to the Elks' building here. The structure will be 160 by 60 feet, of reinforced concrete, face brick, stone and terra cotta, with a concrete foundation, Barrett roof and tile, terrazzo, wood and cement floors. It will contain a roof garden, restaurant, swimming pool, gymnasium, club and lodge rooms and bachelor apartments. Edward F. Neild and C. W. King, of Shreveport, are the architects.

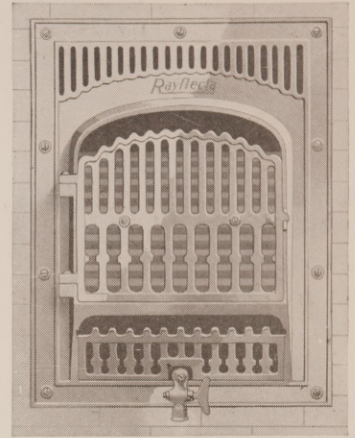
20-Story Building for Baltimore to Cost From \$1,000,000 to \$1,500,000.

George R. Debnam, Jr., Union Trust Building, Baltimore, representing himself and other interests, has acquired a site at Charles and Chase streets, Baltimore, for a building of 15 to 20 stories estimated to cost from \$1,000,000 to \$1,500,000. The property, now consisting of the residence of the late Louis McLane and grounds attached, fronts 134.6 feet on Charles street and 184.6 feet on Chase street. Building plans are not yet made.

Rayflecta

BATHROOM HEATER

Note Its
Distinctive
Features



Not An Imitation But An Improvement

Show your customers the Hinged Door permitting instant accessibility for cleaning. Point out the Continuous Air Circulation by which the entire room is heated Thoroughly and Evenly.

Call their attention to the Superior Appearance and Finish of the Rayflecta. (White Porcelain, Gray Porcelain, and Nickel.)

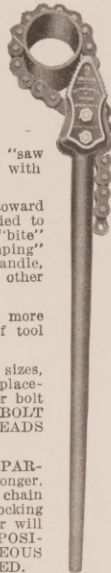
Lay stress upon the Improved Burners which insure maximum heat without fumes or odor. Let them examine the fire-safe construction of the wall-box.

Then you'll sell more Rayflectas than any other heater of this type you might handle. Shall we send you prices and terms?

Gas Appliance Division of The Trolley Supply Co.
MASSILLON, OHIO

SPARTAN

CLAIMS CARRY
CONVICTION



JAWS: Drop forged tool steel, hardened and "saw tooth tempered," permitting resharpening with a file.

TEETH: Milled at an angle—"UP" and "IN" toward center line of wrench when tool is applied to pipe. This angle tooth gives IMMEDIATE "bite" on pipe even when teeth are dull without "cramping" wrench. The angle teeth force jaws against handle, eliminating "SPREADING" jaws, as in ALL other designs.

The design of teeth on periphery of jaws permit more "grips" for all sizes of pipe within capacity of tool than any other tool of its kind.

BOLTS: Made of special alloy steel in standard sizes, insuring greater strength and easier replacement. Two-bolt construction permits use of lower bolt for repair in the field should upper bolt break. **BOLT HEADS WILL NOT PULL OFF OR THREADS STRIP.**

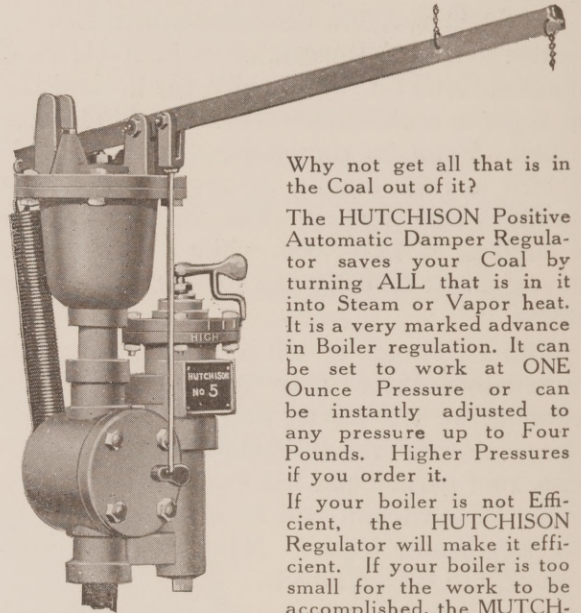
CHAIN: Of standard flat link design, made of "SPARTAN" special alloy steel. Guaranteed stronger, therefore more reliable than any other flat link chain made. It is impossible to cramp chain when locking jaws to pipe, as a slight pull toward the operator will lock chain immediately. **IMMEDIATE AND POSITIVE "BITING" OF JAWS WITH INSTANTANEOUS LOCKING OF CHAIN IS THEREFORE INSURED.**

HANDLE: Forged throughout entire length, insuring greater toughness than "rolled" steel. All parts are carefully selected wrought steel, interchangeable and guaranteed against inferior material and workmanship.

*The Tool in its Entirety is Made
in Our Own Factory*

THE DROP FORGING CO. of New York
293 West Side Ave., JERSEY CITY, N. J.

Why Waste High-Priced Coal Up the Chimney?



Why not get all that is in the Coal out of it?

The HUTCHISON Positive Automatic Damper Regulator saves your Coal by turning ALL that is in it into Steam or Vapor heat. It is a very marked advance in Boiler regulation. It can be set to work at ONE Ounce Pressure or can be instantly adjusted to any pressure up to Four Pounds. Higher Pressures if you order it.

If your boiler is not Efficient, the HUTCHISON Regulator will make it efficient. If your boiler is too small for the work to be accomplished, the HUTCHISON Regulator will improve the results so that you will hardly know it to be the same boiler.

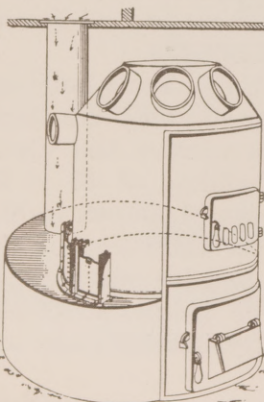
The HUTCHISON Regulator is the Watch Dog of the Coal Bin.

It never lags on the job. It is easily attached to any Boiler.

Write for further information and prices.

HUTCHISON REGULATOR CO.

506-507 Metropolitan Bank Building
613 Fifteenth Street, N. W. Washington, D. C.



Pat. 1922

The HEATWELL

Attachment applied to any make of Warm-Air Heater will make it 100% efficient.

**PAYS BIG MONEY
STATE RIGHTS FOR SALE**

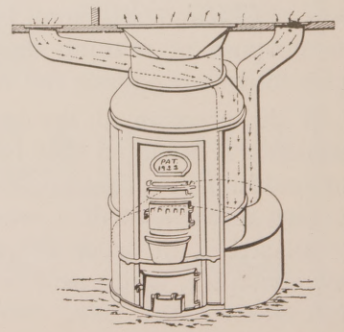
You can guarantee any Furnace Job when you use the HEATWELL.

A BIG PAYING PROPOSITION.

WM. G. CARRICO

1235 Wisconsin Ave.

Washington, D. C.



Pat. No. 1,418,776

Pat. 1922

Contract for \$400,000 Hotel at Fayetteville.

Fayetteville, N. C.—Contract has been awarded to J. A. Jones of Charlotte by the Community Hotel Co. for the erection of the proposed eight-story hotel here to cost \$325,000 without equipment. The building will be 114 by 60 feet, of steel frame construction, with tile, brick and ornamental stone, composition and tile roof, composition and hardwood floors, metal doors, vault lights, ventilators, steel sash and trim, etc. It will be equipped with two passenger elevators and one freight. W. G. Rogers of Charlotte, is the architect. Contract for heating and plumbing has been awarded to the Tommey Plumbing & Heating Co., Charlotte, at \$49,790.

Henry Ford's \$350,000 Assembling Plant for Jacksonville—Nine-Acre Site Acquired.

Jacksonville, Fla.—Following a recent announcement that the Ford Motor Co. of Detroit has acquired a site of nine acres on the St. Johns River, with a 30-foot channel, for an assembling plant, it is now authoritatively stated that the company will build a \$350,000 plant and is having plans prepared by Albert Kahn of Detroit for a building.

The structure will be 200 by 560 feet, one story, of steel and concrete, and will be equipped for a daily output of 150 automobiles. Detail plans have not been worked out.

\$2,000,000 Hotel Planned for Cocoanut Grove, Fla.

Preliminary plans are being prepared by J. C. Gault, of Miami, Fla., for an eight-story hotel at Cocoanut Grove to be erected by Seaview, Inc., at an estimated cost of \$2,000,000. Mr. Gault wires the Manufacturers Record:

"Working plans Seaview Hotel not yet completed; contract to be let about January 1, 1924."

It is announced that the company has a site of about ten acres with an ocean frontage of 476 feet at the south end of Biscayne Bay. The grounds are wooded with royal and cocoanut palms, royal poinciana, rubber trees, banyans, wild figs, etc. The building will be located on a hill and will have a frontage of 231 feet on the ocean, with a depth of 322 feet. It is to be in the shape of two capital U's, one set inside the other, in order to have four sections reaching toward the ocean. A total of 500 guest rooms will be provided. Each wing of the hotel will have two sections with a 40-foot patio between, while there will be a court between the wings 70 feet wide.

Officers of Seaview, Inc., include Charles L. Briggs, president; Charles Gleason and H. Lee Anstey, vice presidents; Harold Holmes, secretary, and James C. Marr, treasurer.

Contract Let for New \$500,000 Hearst Building—To Be Completed by April.

Contract for the erection of the new \$500,000 Hearst building to be erected at Pratt and Commerce streets, Baltimore, by the Evening News Realty Corporation, has been awarded to Frainie Bros. & Haigley, of Baltimore. The building will be fireproof throughout, of reinforced concrete construction, 60 by 145 feet, six stories and basement, and will adjoin a four-story building which is at present being remodeled for use as a part of the structure.

The new building will be occupied by the Baltimore American and the Baltimore News and is expected to be completed and equipped by the first of next April. High ceilings with a modern ventilating system will be installed, together with shower baths, individual lockers and other facilities. There will be a roof garden, rest rooms and a cafeteria.

Space will be provided for the editorial, reportorial and composing rooms, stereotype machinery and presses and also for color presses for the production of supplements and magazines of the Baltimore American.

An accompanying illustration presents a view of the building as it will appear when completed. George R. Callis, Jr., of Baltimore, is the architect.

Knights of Columbus to Erect \$1,250,000 Building.

St. Louis, Mo.—A site at Lindell boulevard and Sarah street here has been purchased by the Knights of Columbus on which it is planned to erect a ten-story building to cost \$1,250,000. The site is 150 by 308 feet and the building will be of cut stone and matt brick. It will be a combination lodge, club and hotel, with four lodge rooms and an auditorium to seat 2000, and 200 rooms and baths for the accommodation of members of the organization. A roof garden will be one of the features of the building and there will be one large dining room and several small ones for private dinners.

Club facilities will include a reading room, library, billiard room, gymnasium, swimming pool, five hand ball courts and a number of bowling alleys, with tennis courts in the rear of the building. Construction will be under the direction of a board of trustees representing each of the St. Louis councils. The present home of the organization here is located at 3549 Olive street.

\$1,000,000 Building in Fort Worth for Shrine.

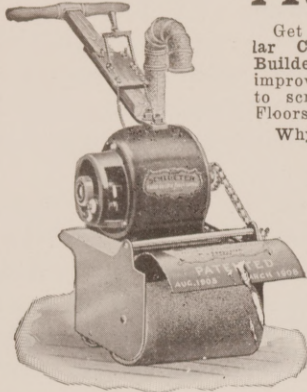
Fort Worth, Tex.—A site has been purchased and plans are being considered by Mosah Shrine for the erection here of a \$1,000,000 temple designed to house all the downtown masonic bod-

THE IMPROVED SCHLUETER

Rapid—Automatic—Ball Bearing—Electric

Floor Surfacing Machines

Attention!



Get in LINE with all the Regular Contractors, Carpenters and Builders. What you need is an improved Schlueter Floor Surfer to scrape all your old and new Floors.

Why surface by hand and suffer—Loss of Time—Money, and Contracts on account of unsatisfactory work, when you can purchase an IMPROVED SCHLUETER SURFACER—the machine with all troubles left out! "The SCHLUETER Surfers are worth their weight in gold" as one of our customers describes them, and he is right.

A few jobs and the machine has paid for itself. In a short time the people will know who and what you are; you get the

work because you have the TOOL. You advance to a higher grade and are a man of high class work, for that is just what the people of today demand.

We want to send you a SCHLUETER on Trial and let you see for yourself the quantity and quality of work it accomplishes.

The Improved SCHLUETER Floor Surfer

will surface right up to the wall or baseboard without the use of Side Roller. Just the Machine you would want for surfacing all floors whether old or new. Perfect results guaranteed. More than 20,000 of our Machines now in use. Guaranteed against defect in material and workmanship for five years.

Manufactured by M. L. SCHLUETER
221 West Illinois St., Chicago, Ill.

SEND FOR OUR PRICES, ALSO TRIAL PROPOSITION

RADIATOR HANGER

YOU'LL USE 'EM YET!

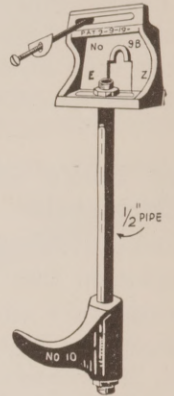
MAKES possible a better looking, more convenient, more sanitary radiator installation.

Permits easy cleaning underneath—ample room for brush, broom, or sweeper.

Radiators can be installed before floors are laid; anchor bolts may be placed in wall during construction, without accurate measurement. Hanger has both horizontal and vertical adjustments.

Thousands of installations. Write for ALL the advantages of the E-Z Way.

HEALY-RUFF CO.
Dept. 15, MINNEAPOLIS, MINN.



STYLE R

INTERNATIONAL STEEL & IRON CO.

Address Dept. 14

EVANSVILLE, INDIANA



INTERIOR VIEW OF OUR STRUCTURAL STEEL PLANT.

The GREAT AND CERTAIN STRENGTH of a sturdy frame of steel is a guarantee of permanence in any type of building.

LARGE STOCK OF
BETHLEHEM AND STANDARD SHAPES
INTERESTING PRICES—:—PROMPT DELIVERIES
CALL ON US FOR SERVICE

STRUCTURAL STEEL AND IRON, MODERN STORE FRONTS, GARAGES, FACTORIES, WAREHOUSES, COAL Tipples, HIGHWAY BRIDGES, STEEL LUMBER, REINFORCING, STEEL WINDOWS, STEEL CELLINGS, ROOF VENTILATORS, CORNICES, ELEVATORS, SKYLIGHTS, ROOFING AND SIDING, MILLWORK AND GLASS.



FOR HOMES, ARCHITECTS AND BUILDERS

If You Want to Get Full Benefit of Your CLOSET SPACE Use the Compact Clothes Hanger Brackets

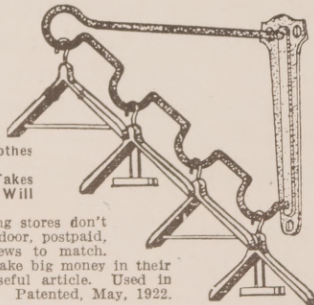
They Keep the Suits Apart. They Save Time and Space. They Keep Your Clothes in Order.

They Can be Put anywhere Clothes Hangers Can be Used.

Put one on Your Closet Door—it Takes the Place of the Ordinary Hook and Will Accommodate Four Hangers.

If your hardware or house furnishing stores don't have them, will send direct to your door, postpaid, nicely finished in nickel with screws to match. Price, 25 cents each. Agents can make big money in their spare time selling this new and useful article. Used in every home. Write for particulars. Patented, May, 1922.

Compact Clothes Hanger Bracket Mfg. Co., 1205 C St., Washington, D. C.



ies of Fort Worth. The site comprises four square blocks, with the exception of one lot, and is bounded by North Texas, Henderson and Lake streets. It measures 755 by 490 feet.

Organizations which it is planned to bring into the building include the Shrine, four blue lodges, two chapters and the Worth Commandery, with a total membership of 12,000. W. S. Cooke is past potentate of the Shrine and chairman of the board of trustees, negotiating the purchase of the property.

To Erect \$450,000 Office Building in Savannah.

Plans are being prepared for a ten-story office building to be erected in Savannah, Ga., by the Realty Investment Co., of that city at a cost of \$450,000. The ground floor, it is stated, will be occupied by the Citizens and Southern Co., who wire the Manufacturers Record:

"Office building to be known as Realty Building; ten stories and basement; 60 by 94 feet; reinforced concrete construction; classic renaissance style architecture; stone base, upper floors face brick; cost about \$450,000; architect, Henrik

Wallin, Savannah; associate architect, G. Lloyd Preacher, Augusta; owners, Realty Investment Co., Savannah; plans ready November 1."

It is understood that G. L. Miller & Co., of Atlanta, will aid in financing the building. Contract will be awarded about November 15.

Plan \$200,000 Hotel at Hamlet.

Hamlet, N. C.—Details are being worked out for the erection here of a \$200,000 hotel by the Mohawk Hotel Co., care Pierre Mazyck, secretary-manager of the Chamber of Commerce of Hamlet. This company is being organized by E. A. Lacke and associates, who plan to build the structure at "Three Points," opposite the Tourist Park. Tentative plans call for a building with a frontage of 150 feet, to contain 100 rooms. It will be fireproof, of red pressed brick and white terra cotta, with tile roof and lobby and composition floors. An architect has not been selected.

While the hotel will be primarily for commercial trade it will also be arranged to take care of some of the heavy tourist travel. Its facilities will include a sun parlor, observatory, etc.

EXTERIOR

LIGHTING

FIXTURES

SMYSER-ROYER LAMP STANDARDS, LANTERNS AND BRACKETS adorn some of America's most beautiful buildings.

ALL ARCHITECTS should have our Catalogue H on file. This catalogue illustrates over 200 different designs of exterior Lighting fixtures, suitable for any possible need, such as banks, office buildings, hotels, apartment houses, churches, schools, etc.

SMYSER-ROYER fixtures are permanent assets.

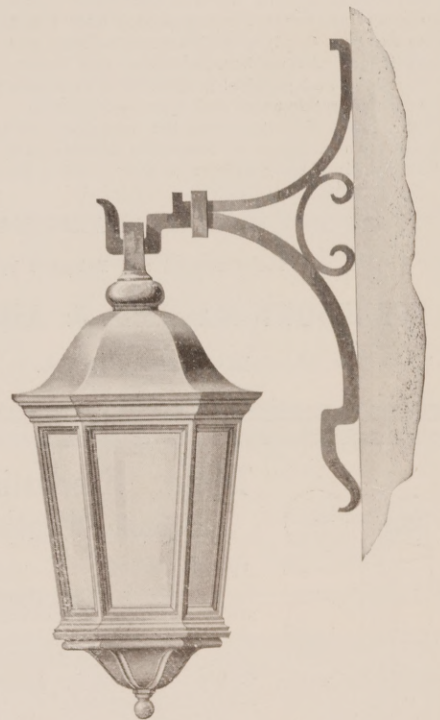
Write for Catalogue H.

When writing for literature kindly mention this publication

SMYSER-ROYER CO.

MAIN OFFICE AND WORKS YORK, PA.

PHILADELPHIA OFFICE—1609 SANSOM STREET



LANTERN NO. 343
PROJECTION 12" TO
CENTER.



The New Concrete Double Wall Form

These forms—in units 4 ft. high—are used for poured double or single walls. Conform to any plan. Easily assembled—quickly moved. They cut labor and lumber costs. All walls reinforced and tied together. M-M buildings are waterproof, fireproof and perfectly insulated. Forms for heavy construction.

Forms removed from house after first pouring, showing how partitions are poured with outer walls.

MISS-McKAY BUILDING SYSTEM, Inc.
SALAMANCA, N. Y.
Write for catalog.

YES, NO AND MAYBE

The mind of man is so constituted that he abhors uncertainties. He wants to classify everything definitely, once and forever; to say, this does so, that does not do so. He loves to think of virtue as a positive quality and evil as an antithesis. He dislikes to consider contributing factors and circumstances that might make an action, virtuous according to usual standards, evil under special conditions because its results are evil, and vice versa.

But we know that everything is relative, nothing is positive. The virtuous little Spartan lad, who supported himself solely by his thievery, would not be considered a proper playmate by present-day mothers of nice children.

So, with heat insulation. It is easiest to think that applying a covering to a hot surface definitely stops the heat from flowing; to look at the prices submitted, pick out the lowest, sign the order and say, "There, that job is done."

But, again, this assumption is erroneous. Insulation values are relative. No material positively stops heat loss. It merely interposes barriers that hinder the heat in its effort to escape. Good insulation stops a large part, poor lets much of it go. As we become better and better acquainted with heat laws and physical properties of materials we make insulators that retain more and more of the heat.

Our latest developments, the crowning production of more than two decades of insulation manufacture possesses both highest insulating efficiency and greatest ruggedness:

2-POINT HEAT INSULATING MATERIAL

Manufactured and Patented by

NORRISTOWN MAGNESIA & ASBESTOS CO.

NORRISTOWN, PA.

Sales Representatives

wanted in every city
to sell

Kilgour Lubricators

for

Elevator Guide Rails

they are

EFFICIENT—ECONOMICAL TROUBLE PROOF

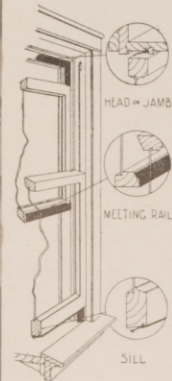
Over 5000 installations
in New York City

For particulars address

TENECO SALES CORPORATION

169 Massachusetts Ave., Boston, Mass.

Building Specialty Salesmen and Elevator Repairmen
Should Answer This Advertisement



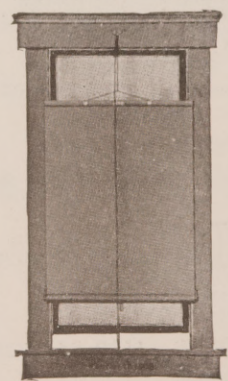
Taylor Everlasting Spring Bronze Weatherstrips

Are individually packed to accommodate various size windows. Easily installed without removing sash. No special tools required, Hammer and shears does the work. Requires no grooving or planing of sash. Effective on new or old buildings.

Our Dealer Proposition will interest you. Write for circular and samples.

TAYLOR, ALLEN & CO.
MORRIS, ILLINOIS

DRAPER SANITARY ROLLER SHADES



- Any Area of Shade—at any altitude, permitting VENTILATION and LIGHT as desired.
- Are Sanitary—Practical—substantial, and more Satisfactory because of better lighting and ventilation they afford.
- Particularly adapted for Schools, Churches, Hospitals, Lodges, Offices and Public Buildings.

This is a well-proven FACT, based on the number of such buildings using them.

Write for Descriptive Literature.

LUTHER O. DRAPER SHADE CO.
Spiceland, Indiana

Building and Construction News

Association and Fraternal

Atlanta, Ga.—Benevolent Protective Order of Elks, Judge L. F. McClelland, Exalted Ruler, is reported to have plans under way for erection of \$1,000,000 to \$1,500,000 lodge building.

Montgomery, Ala.—Montgomery Post, American Legion, plans to erect \$25,000 to \$30,000 lodge building near Court Square; 4 stories and basement, steel and reinforced concrete, brick walls with brick and stone front; 54 lockers, 12 showers, 4 stationery washstands, etc., in basement, assembly hall and ballroom to seat 400 on first floor, 15 bedrooms on each of upper floors.

Knoxville, Tenn.—Kerbela Shrine Temple, tentative, plane to erect \$350,000 temple; site A. A. O. N. M. S., Dr. W. H. MacIntire, Ponot selected.

Robstown, Tex.—Masonic Temple Assn., Wm. Bauer, Jr., Pres., will erect \$30,000 temple; reinforced concrete frame, brick and tile; C. T. Fincham, Archt., Robstown; bids opened Dec. 8.

Waco, Tex.—Karem Temple, A. A. O. N. M. S., purchased 110x165-ft. site, 7th and Washington Sts., and plans to erect \$300,000 to \$400,000 temple; T. F. Bush, Chmn. of Comm.

Lynchburg, Va.—Marshall Lodge, A. F. & A. M., is reported to expend \$50,000 to remodel present lodge building at 9th and Church Sts. instead of erecting building jointly with Hill City Lodge as lately noted.

Morgantown, W. Va.—Labor Union, Perry E. Donley, Chmn., Site Comm., purchased site at High and Kirk Sts. for \$300,000 Labor Temple; business rooms on first floor, offices and lodge rooms on second, auditorium on third.

Mullens, W. Va.—Mountain Lodge No. 156, A. F. & A. M., will erect \$15,000 to \$20,000 lodge building.

Bank and Office.

Birmingham, Ala.—E. M. Elliott purchased site, 5th Ave. and 23rd St., and is reported to erect office building.

Little Rock, Ark.—Little Rock Branch, Federal Reserve Bank of St. Louis, A. F. Bailey, Mgr., Little Rock, has low bid from Herman-McCain Construction Co., Little Rock, for erection of fireproof building; cost about \$250,000; Thompson & Hard-

ing, Archts., Little Rock. (Noted Nov. 15.)

Washington, D. C.—Bank of Commerce, 7th and E Sts., N. W., M. Rosenberg, Pres., is having plans prepared by Milburn, Heister & Co., Union Savings Bank Bldg., Washington, and Durham, N. C., for remodeling building.

Washington, D. C.—Milburn, Heister & Co., Union Savings Bank Bldg., Washington and Durham, N. C., are preparing plans for remodeling Union Savings Bank Bldg., 710 14th St., N. W., Shannon & Luchs, Agents.

Orlando, Fla.—Emil Metbinger leased site, Jackson St. and Orange Ave., and plans to erect \$100,000 four-story office building for professional use.

Baltimore, Md.—Home Friendly Insurance Co., 1026 Linden Ave., will open bids Dec. 20 for erection of office building, Park Ave. and Center St.; 60x150 ft., 7 stories, brick and stone, slag roof, steam heat, wood floors, cost about \$300,000;

Clyde N. & Nelson Friz, Archts., Lexington Bldg., Baltimore; following contractors are estimating: Consolidated Engineering Co., Calvert Bldg.; J. Henry Miller, Inc., Franklin & Eutaw Sts.; Cogswell-Koether Co., 406 Park Ave.; M. A. Long Co., Horn Bldg., Fayette St. and Guilford Ave.; B. F. Bennett Bldg. Co., 123 S. Howard St.; Tase-Norris Co., Inc., 903 Cathedral St.; Chas. L. Stockhausen Co., Gay and Water Sts.; John Cowan & Son, 17 E. Lafayette Ave.; R. B. Mason, 308 W. Madison St.; North Eastern Construction Co., Lexington Bldg.; Price Construction Co., Maryland Trust Bldg.; Thos. Hicks & Sons, 106 W. Madison St., all Baltimore.

St. Louis, Mo.—Preston J. Bradshaw, International Life Bldg., St. Louis, has prepared plans for 10-story office building at 4th and Locust Sts.; cost \$500,000; building will be under supervision and management of Kempland-Rodemyer Co.

University, Mo. (Sta. St. Louis)—Haskell Realty & Investment Co. will erect 3- or 4-story building at Delmar Blvd. and Herman Ave. for offices, stores and apartments; cost, \$150,000.

Memphis, Tenn.—Royal Feed & Milling Co., 827 Neptune St., plans to erect 2-story brick office building; cost \$25,000.

Huntington, W. Va.—Coal Exchange Building Co., Inc., Abe Solof, Sec., will probably receive bids within few days for erection of 14-story bank and office building, 4th Ave. and 11th St.; cost about \$1,000,000, fireproof, reinforced concrete, steel, terra cotta, stone and brick; Gothic type; 325 offices; 4 elevators; Meanor & Handloser, Archts., Huntington; plan to let contract in early spring. (Previously noted.)

Parkersburg, W. Va.—W. H. Dawkins, Ashland, Ky., purchased site at N. E. cor. 7th and Avery Sts., is reported to have plans prepared at once for erection of 8-story office and business block; construction to begin in spring; Mr. awkins will temporarily occupy dwelling on above property.

Churches.

Athens, Ala.—First Methodist Church plans to erect \$75,000 building. Address The Pastor.

Birmingham, Ala.—Fifth Ave. Presbyterian Church, Dr. J. M. Broady, Pastor, is having plans prepared for erection of \$250,000 building, 6th Ave. and 18th St.; to accommodate 1,500.

Paragould, Ark.—First M. E. Church, South, Jas. B. Evans, Pastor, plans to start construction this year on \$100,000 building; auditorium and balcony to seat about 900; John P. Almand, Archt., Little Rock; plans about completed but not ready to let contract; also plans to erect 1-story and basement, 6 or 7-room, brick veneer bungalow, with steam heat, further details not decided. (Noted Nov. 22 under Dwellings.)

Brightwood, D. C. (Station Washington)—Milburn, Heister & Co., Union Savings Bank Bldg., Washington, D. C., and Durham, N. C., are preparing plans for \$175,000 church on Georgia Ave.; Rev. Father Frank X. Bischoff, Pastor.

Sanford, Fla.—Holy Cross Episcopal Church, Rev. A. S. Peck, Rector, plans to rebuild structure lately noted burned.

St. Petersburg, Fla.—Methodist Episcopal Church, South, S. D. Harris, Chmn., Bldg. Com., plans to erect \$250,000 building on site of present structure, 3rd St. and 2nd Ave., North; 2 stories and basement; main auditorium to seat about 2000; Sunday school dept. 1800.

SAMSON SPOT SASH CORD



SAMSON CORDAGE WORKS, BOSTON, MASS.

GURNEY BOILERS RADIATORS

FOR STEAM AND HOT WATER



GIVE COMPLETE SATISFACTION

SHOW ROOMS: NEW YORK PHILADELPHIA WASHINGTON
GURNEY HEATER MFG COMPANY HOME OFFICE: 188-200 FRANKLIN ST. BOSTON



ARCHITECTURAL CHARACTERS IN BRONZE

Special modeling such as portraits, reproductions of trade marks, emblems, rosettes, mouldings, letters, insignia, etc., is very capably handled by our modeling studio at a minimum cost. These can be made separately or incorporated as part of a bronze tablet or sign. Our large supply of stock mouldings, rosettes, letters, etc., can often be used to advantage, thereby effecting a great saving in cost to you.

Write for Booklet.

ART IN BRONZE CO.

1501 COLUMBUS ST. CLEVELAND, OHIO

LIGNINE (WOOD) CARVINGS



UNBREAKABLE
PRACTICAL
ECONOMICAL
Do Not
DETERIORATE
Full Depth of
Grain.

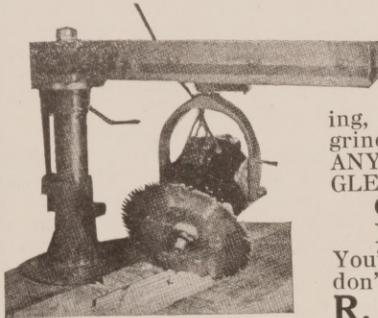
Capitals, Pilasters,
Scrolls, Wreaths,
Drops, Period
Carvings—
Adam, Italian, Louis
XVI, Etc.

New No. 9 Catalog and Sample—FREE.

Ornamental Products Company

Fort at 14th Ave., DETROIT, MICH.

THE "DEW-ALL"



Will cut off, rip, dado, tenon, tongue and groove. Do routing, shaping, sanding, carving, grinding, boring ON ANY BEVEL OR ANGLE.

Quick Change No Belts
You're the loser if you don't own one.

R. E. DeWalt

Bridgeton, N. J.

We Can Ship Tile Promptly

Are you delayed on account of the shortage of TILE?

We are prepared to ship within 10 days after receipt of order, Car Lot or less.

1" White Hexagon, 6x6 Red Quarry, 4x4, 6x6 Black, White, Red and Porphyry Gray Floor Tile.
6x6, 6x3 Glazed Wall Tile, 6" Sanitary Base, 6x2 Bull Nose Cap for Wainscot.

Write for prices. State Quantities and Kinds of Tile wanted and when shipments are desired.

We are shipping into 19 States. We please others, we will please you.

Southern Mosaic Tile Co.

CANDLER BLDG. ATLANTA, GA.



QUARRY TILES

Grey, Ivory, Brown & Red

For Porches, Terraces, Corridors, Kitchens, Laundries, Hospitals, Power Houses, Waiting Rooms, Etc.

Ask for Illustrated Catalog No. 7.

THE UNITED STATES ROOFING TILE CO.

PARKERSBURG, W. VA.

We

Manufacture

Deformed

Reinforcing

Steel

Rounds and Squares

NEW BILLET STOCK

All Sizes— $\frac{1}{4}$ " to $1\frac{1}{4}$ "

PROMPT SHIPMENTS

Straight or Bent

Send us your inquiry

Knoxville Iron Co.

KNOXVILLE, TENN.

THE PHOENIX IRON CO.

MANUFACTURERS OF OPEN HEARTH

Structural Steel Shapes, Beams Channels, Angles and Ship Shapes

Small orders given special attention.

Works: Phoenixville, Pa. Main Office: Philadelphia, Pa.

OFFICES:

22 S. 15th St., Philadelphia 132 Nassau Street, New York
Munsey Building, Washington 110 State St., Boston
C. of C. Bldg., Rochester 26 Victoria St., London

THE PHOENIX BRIDGE CO.

Engineers, Fabricators and Erectors
Bridges and Other Structures of Steel

CAPACITY 60,000 TONS

Small orders given special attention.

Works and Engineering Office: Phoenixville, Pa.

NEVER BREAK WASH TRAY COVER



Made of 26-gauge galvanized iron, double seasoned and solderless, over hard wood frames, and first-class hardware. Also manufacture standard covers, galvanized adjustable elbows, smoke pipe, and ash can.

NEWARK FIRE-PROOF SASH AND DIOR CO.

140 Avon Ave.,
Newark, N. J.

Anchor
Wood
Floors to
Concrete
With



The **LITTLE GIANT** **SPEARPOINT**
CLIP
READY TO INSERT IN CONCRETE

SPEARPOINT
BLASTEEL MFG. CO. KANSAS CITY, MO.
Send for Circular

FLOOR CLIP

LUGS NAILED TO SLEEPER

Strongest
Quickest
Cheapest

Tallahassee, Fla.—St. John's Episcopal Church rejected bids for erection of parish house; E. D. Fitchner, Archt., Tallahassee.

Tampa, Fla.—Bowman Methodist Church, Colored, purchased site, Scott and Jefferson Sts., and plans to erect \$10,000 building. Address The Pastor.

Atlanta, Ga.—St. Luke's Episcopal Church plans to erect parish house. Address The Rector.

Decatur, Ga.—Holy Trinity Episcopal Church, Rev. C. H. Bascom, Rector, plans to erect building of Stone Mountain granite.

Macon, Ga.—St. Paul's Episcopal Church plans to erect parish house. Address The Rector.

Owensboro, Ky.—Church of The Nazarene, Rev. Chas. F. Pegram, Pastor, plans to erect \$20,000 building on Dairness St.

Gastonia, N. C.—D. Lebovitz, H. Schneider and R. Goldberg are members of comm. to purchase site at South and 3rd Sts. for erection of Hebrew Synagogue.

Sapulpa, Okla.—Church of The Nazarene, Rev. B. W. Walker, Pastor, plans to erect church building and parsonage, South Park and Lincoln Sts.; 40x60 ft.; Sunday school in basement; labor to be donated; cost about \$30,000.

Tulsa, Okla.—Immanuel Baptist Church will probably break ground within 2 weeks for erection of \$125,000 building at 2nd and Xanthus Sts.; plans prepared by Dr. Harry Bechamp, Archt., Sunday School Board, Southern Baptist Convention, Nashville, Tenn.

Columbia, S. C.—Second Baptist Church, W. E. Sloan, Chmn., Bldg. Comm., will open bids Dec. 18 (extended date) at office J. H. Sams, Archt., Columbia, for erection of Sunday school building; 3 stories, 60x78 ft., basement of brick, upper floors brick veneer, concrete and red gum floors, 40-lb. tin roof, concrete and brick foundation, ventilators, rolling partition, wire glass, steam gravity system of heat. (Lately noted.)

Greenville, S. C.—First Baptist Church, Dr. Geo. W. Quick, Pastor, plans to erect Sunday school building at Augusta Rd. and Jones St.

Inman, S. C.—First Baptist Church, L. B. Jumper, Chmn., Bldg. Comm., has plans by Casey & Fant, Anderson, S. C., for \$40,000 to \$50,000 building; about 70x75 ft., brick. (Lately noted.)

Memphis, Tenn.—Herbert Ave. Church of Christ, Rev. John Allen Hudson, Pastor, is having plans prepared by Hubert T. McGee for erection of buff brick building; Doric detail, stone trim, 68x116 ft., ground, main and gallery floors; Sunday school to accommodate 600 and auditorium and gallery to seat a heating plant in basement, main auditorium and gallery to seat 1,200; rolling partitions. (Previously noted.)

Corsicana, Tex.—First Baptist Church, Byron Cheney, Chmn., Bldg. Comm., plans to erect \$100,000 building.

Dallas, Tex.—Greenville Ave. Christian Church has permit for erection of basement for brick church; cost \$12,000. Address The Pastor.

Eastland, Tex.—First Christian Church will erect \$40,000 brick building. Address The Pastor.

Fort Worth, Tex.—Hemphill St. Presbyterian Church will erect \$40,000 building; 55x80 ft. ordinary construction with brick walls, metal and composition roof, wood floors, ordinary electric wiring; hot air heating, \$3000; date of opening bids not set. Address A. W. Flynt, 828 Taylor St., Fort Worth. (Lately noted.)

Gonzales, Tex.—Baptist Church has plans in progress by Will N. Noonan, 2nd floor, Moore Bldg., San Antonio, for erection of 34x60-ft. frame and brick addition and new balcony; cost \$20,000.

Hillsboro, Tex.—Central Presbyterian Church, W. M. Williams, Chairman, Bldg. Comm., selected Paul G. Silber & Co., 331 Bedell Bldg., San Antonio, as architects for \$50,000 brick, tile and concrete buildng, about 60x75 ft., shingle roof, pine floors. (Lately noted.)

Marshall, Tex.—St. Joseph's Catholic Church, Rev. J. A. Schauf, Pastor, has plans and specifications by J. Ed. Overbrook, Dallas, for erection of \$60,000 Gothic type building;

50x110 ft., brick, stone trim. (Previously noted.)

Robstown, Tex.—Methodist Church, M. K. Fred, Pastor, will erect \$50,000 building.

Taylor, Tex.—First Baptist Church contemplates erection of \$125,000 brick and stone building. Address The Pastor.

Tyler, Tex.—Baptist Church has preliminary plans in progress by J. H. Bothwell, 401-03 N. Broadway Ave., Tyler, for erection of \$20,000 building; 2 stories, 68x86 ft., brick and concrete, electric wiring, no heating or plumbing; capacity 700.

City and County

Arcadia, Fla.—Jail DeSoto County will vote Jan. 3 on \$180,000 bonds, including \$40,000 for erection of fireproof jail and reconstructing present structure; W. B. & W. D. Talley, Archts., Lakeland, Fla., are drawing plans. (Noted Dec. 6.)

Baltimore, Md.—Police Sub-Stations—Board of Awards, Mayor Howard W. Jackson, Pres., will receive bids in duplicate until Dec. 19 for erection and completion of police sub-stations at Frederick and N. Bend Rds., Harford and Rockwood Aves., and Liberty Hgts. and Oxford Aves.; former two about \$8,000 each, 28x39 ft.; latter to cost about \$16,000, 26x67 ft.; all brick with slate roofs; O. Eugene Adams, Archt., Calvert Bldg., Baltimore; plans and specifications may be seen at office Supervising Engr., Room 618, Hearst Tower Bldg., Baltimore. (Lately noted.)

St. Louis, Mo.—Morgue—Citizens' Supervisory Bond Issue Comm., Mrs. John S. Payne, Sec., will erect \$160,000 morgue; 88x130 ft., fireproof, tile roof, terrazzo and tile floors, direct radiation steam heat, indirect lighting, no elevators; L. R. Brown, Archt., St. Louis; date of opening bids not determined.

Aberdeen, Miss.—Jail—Monroe County, Joe T. Morgan, Clk., Board of Supervisors, will repair jail; bids opened Dec. 3.

Iuka, Miss.—Courthouse—Tishomingo County, Willie Leone Hiatt, Clk., Board of Supervisors, will remodel and enlarge courthouse; bids opened Dec. 5.

Asheville, N. C.—Municipal Building—City, Mr. Cathey, Mayor, will

PENNSYLVANIA STRUCTURAL SLATE CO., Inc.

BLACKBOARDS—URINALS—CLOSET—SHOWER—STRUCTURAL SLATE FOR ALL PURPOSES
STALLS STALLS STALLS

"Yours for Prompt Service,"

DOMED BLDG.—Main Office

EASTON, PA.



THE H. B. IVES CO.

New Haven, Conn., U. S. A.

ESTABLISHED 1876

INCORPORATED 1909

Manufacturers of

BUILDERS' HARDWARE

HIGH GRADE WINDOW AND DOOR SPECIALTIES

Write for Illustrated Folder.

erect \$200,000 building on Market St. south of city hall to house city market, fire and police depts.; construction will probably start latter part of Dec.

Lumberton, N. C.—Home—Board of Comms., of Robeson County, John W. Ward, Shmn., will receive bids until Jan. 14 for erection and completion of group of buildings for county home near Lumberton; cost about \$100,000; hollow tile, concrete floors, vaults, ventilators, steel sash and trim, wire glass; plans and specifications from Wilson & Berryman, Archts., Columbia, S. C., and may be seen at offices Wilson & Berryman, Columbia, S. C., and Wilson, N. C., Builders Exchange, Columbia, Chamber of Commerce, Raleigh, N. C., Greensboro, N. C., Charlotte, N. C., and E. J. Britt, County Atty., Lumberton. (Previously noted.)

Wilson, N. C.—Courthouse—Wilson County Board of Comms., Henry B. Lane, Chmn., will receive bids until Jan. 8 for erection of 3-story fireproof courthouse with jail on top. Nash and Tarboro Sts.; cost \$350,000 to \$400,000; 145x145 ft. with columns around circular entrance, reinforced concrete frame, faced with Indiana limestone with granite base and steps, marble floors in halls, lobbies and courts, composition cork and concrete floors, Barrett specification roof, vapor system of heat, about \$15,000, conduit system electric wiring, 3 electric elevators, hollow and interior tile, metal doors, vaults, mail chutes, ventilators, steel sash and trim, wire glass; plans and specifications from Fred A. Bishop, Archt., Petersburg, Va.; separate bids for jail equipment. (Previously noted.)

Blackwell, Okla.—Memorial Building—City will vote Dec. 18 on \$175,000 bonds for American Legion Memorial Building. Address The Mayor. (Lately noted.)

Tulsa, Okla.—Police Station—City has selected F. A. Dugan, Castle Bldg., Tulsa, to prepare plans for erection of \$95,000 police station, 4th and Elgin Sts.; Bedford stone, T-shape, 2 stories in part; drill, shower, boiler rooms, kitchen, garage, etc.

Lubbock, Tex.—City Hall—City Comsn. selected Sanguinet, Staats &

Hedrick, Fort Worth, as architects for \$75,000 2-story brick city hall building. (Lately noted.)

San Antonio, Tex.—Auditorium, Fire and Police Station—City, John W. Tobin, Mayor, voted \$4,350,000 bonds, including \$200,000 for purchasing site and constructing auditorium and \$100,000 for fire and police station. (Lately noted.)

Huntington, W. Va.—Courthouse—Cabell County Comms. will open new bids Jan. 9 for erection of 3-story, reinforced concrete, 65x107-ft. addition west of present courthouse; Rof. L. and Sidney L. Day, Archts., Huntington. (Lately noted.)

Dwellings.

Winter Haven, Fla.—A. H. Leonard will erect Italian renaissance type residence overlooking Lake Howard; 2 stories, 10 rooms, stucco over hollow tile, loggia on second floor, cost \$20,000; A. Scotini, Archt., Lakeland, Fla.

Miami, Fla.—J. R. Goodley, 814 Meridian Ave., will erect concrete residence in Ocean Beach addition; cost about \$10,000; 30.6x43 ft., 6 rooms and 2 porches.

New Orleans, La.—Dr. T. J. Dimitry purchased site, St. Charles and Napoleon Aves., and plans to erect brick residence.

Baltimore, Md.—Owners' Realty Co., 2 E. Lexington St., will erect 18 two-story brick dwellings, N. W. cor. Elliott Driveway and Littleton Rd.; 18x31x30 ft.; total cost \$50,000.

Baltimore, Md.—John C. Kump, 231 St. Paul Place, will erect 4 dwellings, north side Woodland Ave., near Harford Rd.; total cost \$14,000; 11-2 stories, 24x28 ft., asphalt shingle roof, pipeless furnaces; plans by owner.

Baltimore, Md.—Albert B. Kurdle, 3255 Eastern Ave., will erect 21-2-story residence and garage on Dorchester Rd.; hollow tile, 40x28x24 ft., cost \$10,000.

Baltimore, Md.—George Shafer will erect 1-story frame residence, N. E. cor. Cross Country Blvd. and South Ave., Mount Washington; cost \$10,000.

Baltimore, Md.—W. Edgar Harrison will erect 21-2-story frame dwelling and garage, east side Brinkwood Rd., north of Dryden Ave.; cost about \$10,000.

Baltimore, Md.—Howard P. Skinner will erect 2-story frame cottage, south side Gittings Ave., east of Oak Lane; cost \$10,000, 35x35x33 ft.

Tupelo, Miss.—E. B. Kiser will erect 2-story brick veneer residence on Church St.

Carthage, Mo.—Rev. Dr. J. F. King, 2008 Sergeant St., Joplin, Mo., will erect dwelling; 32 by 46 ft.; frame; slate covered composition roof; oak floors; hot air heat; R. R. Van Pelt, Archt., Frisco Bldg., Joplin. (Lately noted.)

Independence, Mo.—Bert Hafer will erect residence, 611 N. Delaware St.

Independence, Mo.—Ralph Stone will erect residence, N. Willis St.

Independence, Mo.—C. W. Trego will erect residence Hayward and Willis Sts.

Independence, Mo.—James Watson will erect residence in Gardner Place near Chrysler St.

Kansas City, Mo.—Harry A. Darling, Pres., Kansas City Envelope Co., purchased site for residence on 67th St.

Leeds, Mo.—Jas. N. Russell, Russell Grain Co., Kansas City, purchased 16-acre site on Blue River opposite Leeds and will erect number of dwellings for negroes; 5 already completed.

Concord, N. C.—J. W. Cannon will remodel residence in Concord and erect summer residence at Mayview Park; Harold Tatum, Archt., Columbia, S. C.

Greensboro, N. C.—Allen T. Preyer will erect \$16,850 residence on W. Bessemer Ave., near Carolina St.; 2 stories, 9 rooms.

Greensboro, N. C.—A. R. Perkins will erect 1 colonial and 2 Dutch type bungalows on Fisher Ave. (See Hotels and Apartments—Buildings Proposed.)

Fort Worth, Tex.—Carb Building Co., secured permit to erect 15 residences; cost \$8500 to \$27,500.

Tulsa, Okla.—K. M. Vaughn has permits for erection of 3 dwellings at 25th and Ottawa Sts., Sunset Terrace; total cost \$51,000; English type, brick veneer, 2 baths each.

Memphis, Tenn.—Palmer Bros. purchased lots in University Park sub-division and will erect 13 dwellings; brick and stone, 5 and 6 rooms.

AMERICAN ELEVATORS

Built by

AMERICAN ELEVATOR and MACHINE CO. INCORPORATED LOUISVILLE, KY.

FARRIS BRIDGE CO.

Bridges, Coal Tipples, Mill Buildings.
Toll Bridges Financed and Built.

Plans and Estimates Furnished.

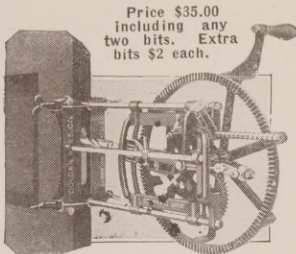
CUMBERLAND, MD.

65 Liberty Trust Bldg.

"Your Mortiser Gives Great Service"

—one user said.

Another wrote: "Would not be without it. Paid for itself on one job." Still another writes: "Put in 30 locks in 6 hours (total time). It is a money maker for me." Hundreds more like them. Surprises everyone who uses it. Turns loss into profits.



Price \$35.00 including any two bits. Extra bits \$2 each.

Will cut 100 to 120 perfect mortises per day. Saves 80% of your mortising cost—turns it into profits. Hundreds of carpenters, cabinet makers and contractors using it. Works perfectly in any kind of wood—hard, soft, cross-grained, end wood or through dowel pins. Cuts a round hole or 6" slot. Uses 1/4", 3/8", 1/2", 5/8" and 3/4" bits. Special bits up to 1 1/4". Also, special base for wide stock furnished on request.

MONEY BACK GUARANTEE

If not satisfied with the Champion Mortiser after ten days' trial you can return machine and get your money. Fully guaranteed for one year. Send today. COLGAN MACHINERY & SUPPLY CO. 1012 Hayden Bldg., Columbus, Ohio

Anchor Brand Colors

Are the Best Made

For Mortar and Cement Coloring. They are Permanent, Brilliant and Strong.

A Building Material Dealer's Stock is incomplete without a line of Colors for this purpose.

We solicit your inquiries and requirements.

C. K. Williams & Co.

Easton, Penna, U. S. A.



ROANOKE IRON & BRIDGE WORKS, Inc.

Structural and Ornamental Iron

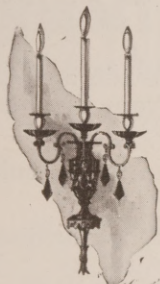
Wrought Steel Fences

Gray Iron Castings

Jail and Prison Cell Work

Write for Estimates

ROANOKE, VIRGINIA



LIGHTING FIXTURES

Exclusive Designs
Bronzes and Wrought
Iron Work

for architects who seek individuality in design and excellence in Craftsmanship.

WALTER G. WARREN & COMPANY

351-363 E. Ohio St., Chicago.

Reliable Roofers

We go anywhere in the Southeast.

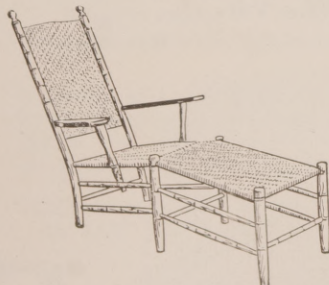
We sell material as well as contract.

Let us have your inquiries. We will give you the kind of Service you like.

WALKER ROOFING CO.

Charles N. Walker, Proprietor.

Atlanta, Ga.

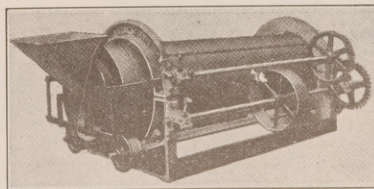


No. 11 Chaise Longue

SINCLAIR CHAIRS

Different in
QUALITY
CONSTRUCTION
FINISH

The Sinclair-Allen Mfg. Co., Inc.
MOTTVILLE, N. Y.



Washes

GRAVEL
SAND
CRUSHED
ROCK

Stocker Improved Concrete Material Washer

Rakes and scoops the material against a constant flow of water, which frees it from dirt, clay and other impurities. Can be moved from job to job with ease—it is portable. All parts are interchangeable. Washes ten or more tons per hour. Write for further information.

P. M. WIEBE & SON - Highland, Illinois

United States Custom House

Wilmington, N. C.

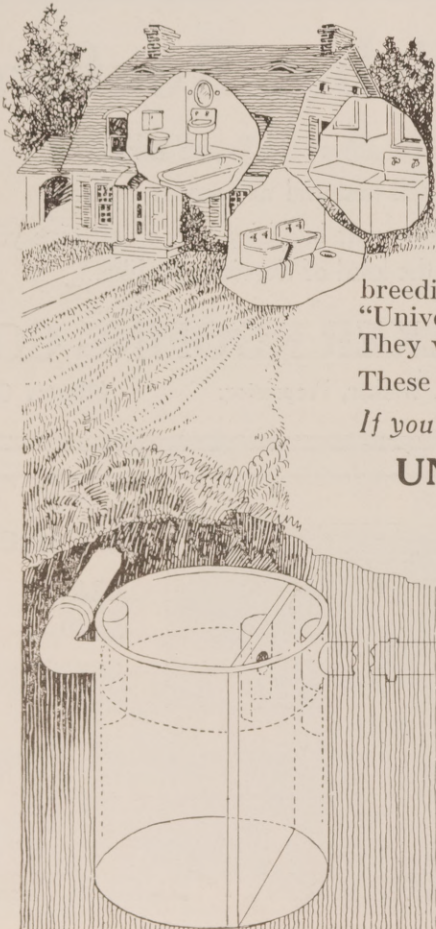
John W. Kissell &
Co.,
Plaster Contractors.

Southern Gypsum
Company's hard
wall plasters used
throughout this
building.

Sold by Agents
everywhere.



SOUTHERN GYPSUM COMPANY, INC., North Holston, Va.
Wall Plasters, Plaster Paris, Plaster Finishes, Plaster Board and Gypsum Block. Printed matter on application.



An Investment in Health!

The "Universal" Sanitary Systems provide a method of sewage disposal to those isolated from the city or town sewer system.

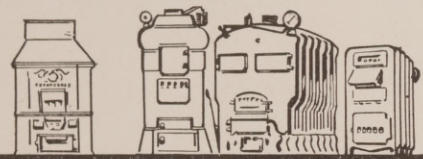
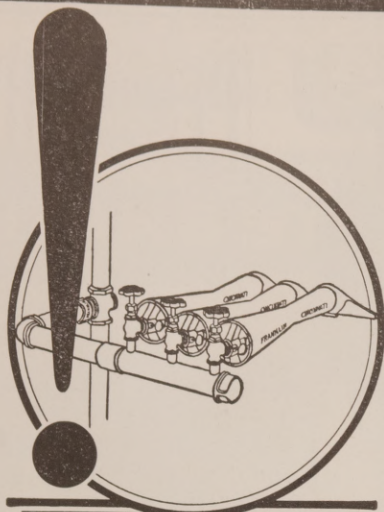
This applies to the country home, farm house, suburban, industrial or mining village.

It is recognized by all health authorities that the disease breeding, soil polluting, unsightly outhouse must go. The "Universal" Septic Tanks solve the problem in a satisfactory way. They will operate with or without running water.

These tanks are inexpensive and easy to install. Write us for prices.

If you are building a new home ask us about our concrete laundry tubs.

UNIVERSAL CONCRETE PRODUCTS CO.
New Martinville, W. Va.



*Adaptable To All Makes
of Furnaces—Boilers—Arcola Heaters
and Garage Heaters.*

The Franklin New Improved, Quick Removable Gas Burner System

The Franklin New Improved Quick Removable Gas Burner System solves the problem for residence combination gas and coal heating.

It can be installed in any hot water or steam boiler, also in warm air furnaces, Arcola Heaters and Garage Heaters of any type.

The Quick Removable feature permits one to completely remove the burners or re-install them in a minute's time without the use of tools.

The Venturi Tube construction is scientifically accurate and is designed from the calculations for Venturi Tubes approved by the UNITED STATES BUREAU OF STANDARDS.

Economy and perfect combustion are obtainable under any and all conditions without any air mixer regulation, as varying gas pressures will not affect the burner or cause it to backfire in the mixer or go out under low pressure.

Franklin Gas Burner Mfg. Co.

CINCINNATI, OHIO

A complete circular upon request—every mail box is our salesman. Write for prices today.

The Vendor Slate Co.

COLOR IN PENNSYLVANIA SLATE

ANOTHER Vendor contribution is the making available of dark bodied Pennsylvania slates in textures which, through interest, play of shadow, and depth, bring out atmospheric color to a subtle and satisfying degree, especially for formal architecture where the gay feeling of colored slate is out of character.

Some Pennsylvania slates also acquire surface weathering and duplicate, in studies we have made, the age appearance of early Colonial imported slate. We execute commissions complete or collaborate to any desired extent; from the making of a mere layout to the undertaking of the entire roof work, sketches to material in place.

On receipt of blueprints we will promptly describe an appropriate slate roofing (including its cost) based on our knowledge of available slates and how to work them. Such service is under professional direction. Have we also your address for our occasional literature on roofing slate??

MAIN OFFICE AND DEPARTMENT OF ARCHITECTURAL SLATE
AT EASTON, PA. SALES BRANCHES IN PRINCIPAL CITIES.

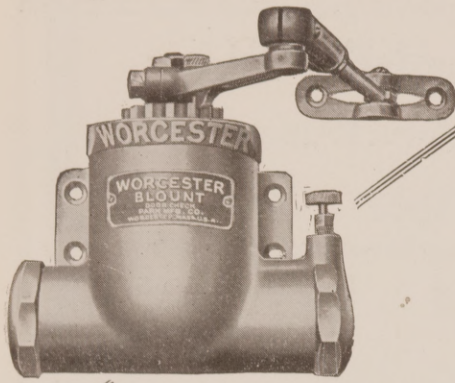


The roof work detailed in this series represents selections from representative architects, executed in collaboration with Vendor Slate Company's executives and using material obtainable from Vendor quarries. This example is from the office of Mr. Raphael Hume.

• Largest Shippers of Roofing Slate in the World •

• VENDOR SLATE CO. Inc. •
• EASTON - PENNSYLVANIA •





The
better the
door—
the better
the reason
for using

THE NEW, IMPROVED

Worcester Blount Door Check

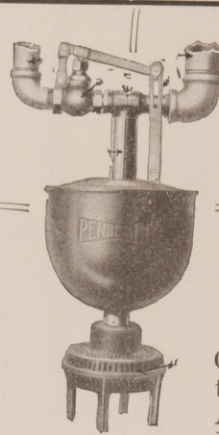
They save wear and tear—eliminate slamming—prevent breakage—bring peace and quietness into home, office, and factory. Standard for 30 years—now offered with SEVEN improved features that make it the most satisfactory door closer on the market. Made in SIX MODELS—a style and size for every door. Be sure to specify "Worcester Blount Door Checks"—BEST—always.

Write for descriptive brochure today—showing the 6 models, with prices, etc.

Park Manufacturing Co.

FACTORY AND MAIN OFFICE
46 Lagrange Street
WORCESTER, MASS.
New York Office, 117 Chambers Street

Park Production and Engineering Organization assure utmost in delivery and mechanical service.



Working Parts Above Water

One of the exclusive features of the PENBERTHY AUTOMATIC CELLAR DRAINER is the arrangement of the working parts above the water level. Not being subject to corrosion the life of the mechanism is greatly lengthened and operation without attention is assured.

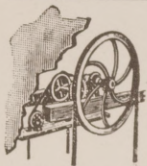
All jobbers sell the Penberthy Automatic Cellar Drainer. Write for circular.

Penberthy Injector Co.

Established 1866

1244 Holden Ave. Detroit, Mich.
Canadian Plant, Windsor, Ont.

Elevators and Dumbwaiters.



Invalid Lifts Sidewalk Lifts
Hand and Electric

Send for Bulletin 4-U-2

Storm Manufacturing Company

50 Vesey Street, Newark, N. J.

Atlanta Terra Cotta Company

Manufacturers of

ATLANTA ARCHITECTURAL TERRA COTTA

1303 THIRD NATIONAL BANK BUILDING

Factory at EAST POINT, GA.

VAN RENSSELAER P. SAXE,

Consulting Engineer

STRUCTURAL STEEL
CONCRETE CONSTRUCTION

Knickerbocker Building

Baltimore, Md.

The Hawley Down Draft Furnace Co.

Builders of the Original Down
Draft Smokeless Furnace and
the Hawley-Schwartz Metal
Melting Furnaces.

FORMERLY OF CHICAGO

EASTON

PA.

DEALERS, HERE IS YOUR
OPPORTUNITY FOR
EXTRA PROFIT

PRESTO SLIDING STAIRS

ANOTHER
20TH CENTURY
ACHIEVEMENT

MAKES AN EXTRA
ROOM AVAILABLE

TAKES UP NO
SPACE BELOW

ADDS FROM \$200
TO \$500 TO THE
VALUE OF ANY HOME

SAFE & SIMPLE
TO OPERATE

QUICKLY INSTALLED
IN NEW OR OLD
HOMES

WRITE FOR PRICES
AND SALES PLAN



FARLEY & LOETSCHER MFG. CO.
SASH, DOORS, FRAMES, MOULDINGS
QUALITY BILT INTERIOR WOODWORK
DUBUQUE — IOWA.

SPECIAL ANNOUNCEMENT

In addition to
DRY MORTAR COLORS

In 100-lb. Bags or Barrels
We now also manufacture

PASTE COLORS

sometimes called PULP

Strongest - Richest - Dependable
always the same.

Quick Deliveries—Lower Freight Rates
because shipped from Nashville, Tenn., mill.

DON'T BUY ELSEWHERE

before getting our prices.

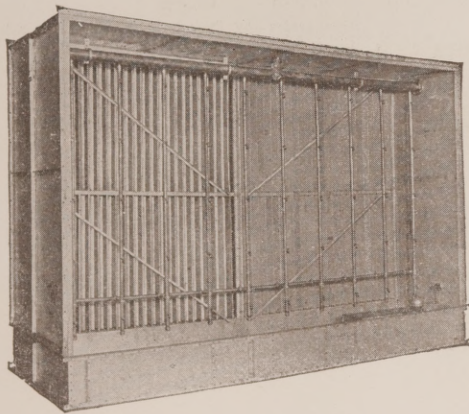
OUR POLICY IS
100% DEALER DISTRIBUTION

Write office nearest to you.

16th and Clinton St.
Nashville, Tenn.

30 N. LaSalle St.
Chicago, Ill.

TAMMS SILICA CO.



81,000 Cu. Ft. Air Washer

Two washers of this size and two of 35,000
cut. ft. capacity were built by us for the New
Lowell High School. Massachusetts Air
Washers can be built in any size to meet your
needs. Easier to set up right than any other
washer.

Massachusetts Blower Company
WATERTOWN MASSACHUSETTS



The HERRICK Refrigerator—Waterloo, Iowa—Outside Icing

Every new home you plan should have the greatest conven-
ience—"The Herrick Outside Icing Refrigerator" located in
the best place.

This refrigerator operates on the cold outside air during
winter.

In summer the iceman never enters the home. He calls,
ices the Herrick thru the Outside Icing Equipment and re-
quires no attention. The house can be locked and although
he cannot enter, he cares for the refrigerator.

If you had supplied such a convenience for all of your
clients in the past, wouldn't they appreciate it? Your pres-
tige would be greater. The plans and specifications are fur-
nished you free.

The Architect who has our free plans can show the exact
location of the Herrick Outside Icing opening, saving his
clients the extra cost of a special size to fit odd wall openings.

Decide right now to give your clients the benefits derived
from this and they will thank you for it.

HERRICK REFRIGERATOR CO.
RIVER ST., WATERLOO, IOWA

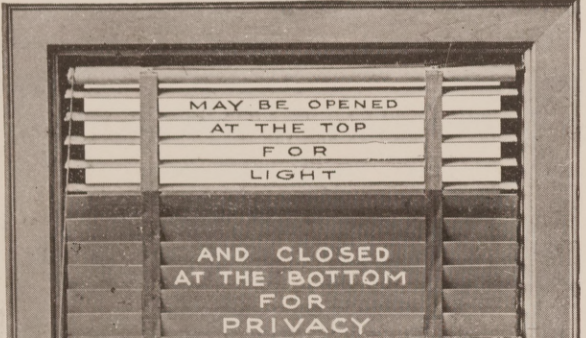
SPECIAL MILL WORK

High Grade

Our specialty is manufacturing millwork to fit any architect's requirements in any wood desired. Veneered doors and all other items of millwork manufactured in our own plant. A full mechanical equipment and experienced organization enables us to guarantee prompt service and accurate workmanship and material of good quality. Send us plans for estimate.

Enochs Lumber & Manufacturing Co.

JACKSON, MISS.



Equip Your Building With
"Burlington"
 Venetian Blinds

they
**CONTROL THE LIGHT
 ADMIT THE AIR
 KEEP OUT THE SUN**

better than shades and awnings, cost less and last longer. Investigate their merits and join the army of satisfied owners.

Made by
Burlington Venetian Blind Co.
 646 Lake St. Burlington, Vermont
 Catalogue Upon Request
 We also manufacture Window and Door Screens.

Here is a Glazing Composition that will—



Adhere tightly to iron, steel, wood, glass, stone or concrete. Make an elastic joint—tight yet indefinitely flexible, preventing glass from cracking.

Guaranteed to withstand heat, cold, rain or extreme climatic conditions, without chipping or peeling.

KUHL'S ELASTIC GLAZING COMPOSITIONS

is used for bedding and glazing all classes of glass construction and is unequalled for greenhouses. Also supplied in shades to match for pointing up stone work, terra cotta, granite, etc.

Complete literature on this exceptional product together with testimonials from such prominent architects as Cass Gilbert, also the Lackawanna and Pennsylvania Railroad, will be mailed on request.

There is a reliable dealer in your locality selling Kuhl's Elastic Glazing Composition. His name will be sent on request.

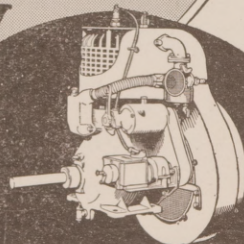


H. B. FRED KUHL'S

Sole Manufacturer

6413 Third Ave., Brooklyn, N. Y.

don't be misled
 by your old conception
 of a gasoline engine.
 Consider only



BECAUSE of its shape and size this "New-Way" portable super-power unit will work in any place and operate any kind of machinery—portable, semi-portable or traction.

Used with a generator makes possible the operation of electrical construction equipment—drills, floor surfacers, welders, field telephones, spot and flood lighting and many others. Contractors use this unit in remote places to do jobs

heretofore impossible. Variable control, 2 to 5 horsepower. Weight, ready to mount on any equipment, 248 lbs. Write for Circular C-22.

If you have a power problem let us help you work it out. It incurs no obligation on your part. A letter will bring our traveling engineer to your office.

The New-Way Motor Company
 Lansing, Michigan, U. S. A.
 Eastern and Export Office,
 Woolworth Building New York

Architecture

SOUTHERN ARCHITECT *and* BUILDING NEWS



DECEMBER, 1923
ATLANTA, GA.



The Dexter-Horton
Building, Seattle,
Washington
Served by Twelve
Kaestner & Hecht
Elevators
John Graham,
Architect
Puget Sound Bridge
& Dredging Company,
General Contractors



Kaestner & Hecht Elevators

THE Dexter-Horton Building in Seattle, Washington, is to be the largest and finest office building in the Pacific Northwest. In it there will be one thousand offices. The equipment and appointments throughout will be of the latest metropolitan type. It is fitting that a building of this character should be served by Kaestner & Hecht "Variable Voltage Control" Elevators. These elevators, with a speed of 600 feet per minute, provide not only the well-known K&H enduring dependability, but also that unusual degree of smoothness of operation, ease of control, and positive luxury of riding quality found only in elevators equipped with K&H "Variable Voltage Control."

Kaestner & Hecht Co. • Founded 1863 • Chicago

Ask Your Architect

BIRMINGHAM • CLEVELAND • DALLAS • DETROIT • INDIANAPOLIS • MILWAUKEE
MINNEAPOLIS • PITTSBURGH • ST. LOUIS

Why Architects,
Contractors and
Dealers
Recommend

Andersen FRAMES

1. Immediate delivery—no expensive delays waiting for special custom made frames.
2. 121 sizes ready for every purpose.
3. Delivered in two compact bundles plainly marked and easily handled.
4. 7 parts instead of 57. No small parts to be lost or broken.
5. A frame up in ten minutes. No sorting, measuring or refitting. Pockets and pulleys in place.
6. Accuracy gives smooth-running windows, yet excludes all weather.
7. Modern machinery, methods and specialization lowers cost at factory; quickness of assembly saves you time, labor and money on the job.
8. Better results in frame, brick or stucco buildings.
9. White Pine preserves original accuracy and gives continuous service.
10. Made by the largest exclusive standard frame manufacturer. The trade-mark is absolute protection.



Windows Run Smoothly in Andersen Frames

IT'S a pleasure to have windows that can always be raised or lowered at a touch of the hand.

Two important steps in manufacturing give Andersen Frames this smooth-running quality. First each part of the frame is accurately made. Then the original accuracy is preserved for many years by using White Pine in all exposed portions of the frame.

By specializing the Andersen Factory is able to make frames that are not only exact, but so simple that any carpenter can nail up the seven units complete with pockets and pulleys in place in ten minutes or less.

Write For Free Booklet

We will be glad to explain fully the different features listed on this page. Write and tell whether you are building your own home, or whether you are interested as an Architect, Contractor, Carpenter or Dealer.

Andersen Lumber Company
Dept. X. Bayport, Minnesota
(Formerly South Stillwater)

Andersen FRAMES

Church Seats

sani-white



INCREASINGLY high standards of living in America have turned the architects' and builders' attention to the bathroom. The beautiful and practical attribute of the modern, model home is the All-White bathroom. And it really is a standard of better American living."

When you specify the ALL-WHITE bathroom



No. 142

Plain pattern for regular bowl. No screws, no nuts, no bolts appearing above the surface of bowl. The best value, sheet-covered, all-white seat on the market.

WHEN you specify the All-White bathroom perfection of detail demands that you include in the specification the Church Sani-White Toilet Seat. It promotes harmony and cleanliness. It will last a lifetime.

The ivory-white sheathing of the Church Sani-White Seat, altogether different from paint or enamel, renders it impervious to all moisture or dirt. Being non-porous it cannot hold odors. It is guaranteed not to change color,

crack, craze, warp or chip. It makes the very best bathroom job very much better.

If you haven't full and complete details in your file of all Church Seats, send the coupon below for our catalog. We will also forward "Why White," a book we send those whom our national advertising has interested in the All-White bathroom—your clients, perhaps. Use the coupon.

C. F. CHURCH MANUFACTURING CO.

303 Orange Street,

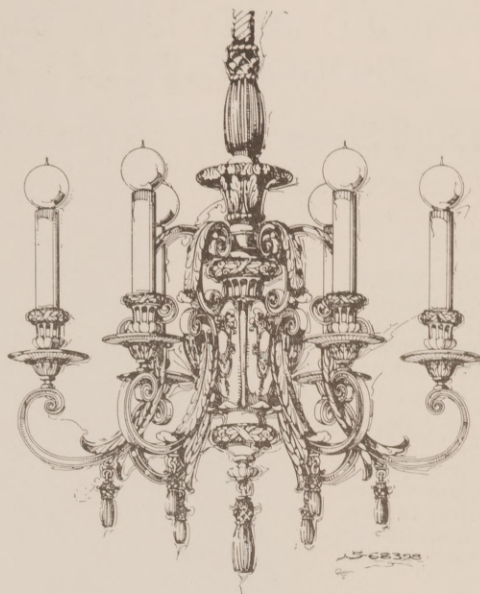
Holyoke, Mass.

Atlanta	Bayonne, N. J.	Detroit	Minneapolis
Baltimore	Chicago	Kansas City, Mo.	Miami, Fla.
Boston	Cleveland	Los Angeles	New York
San Francisco	Richmond, Ind.	Peoria	Philadelphia
	Stamford, Conn.		

C. F. CHURCH MFG. CO.,
303 Orange St., Holyoke, Mass.

Send your catalogue and other literature we should have in our files in reference to Church Sani-White Seats.

Name.....
Address.....
City.....



DISTINCTIVE Lighting Creations, carefully designed and executed to conform faithfully with the architectural period of their settings, comprises one of our primary aims in the manufacture of special lighting equipment.

But with all our exacting consideration of design harmony, the importance of correct illumination is not overlooked and lighting effects suitable for each and every location are planned with infinite care.

We maintain an experienced Engineering Department in connection with a trained designing force who combine their skill and ingenuity in producing lighting fixtures of the highest standard.

These Departments are at your service, without obligation, to solve your lighting problems and to suggest or help in your selection of appropriate lighting equipment.

The EDWIN F. GUTH COMPANY
DESIGNERS - ENGINEERS - MANUFACTURERS -

Lighting Equipment



ST. LOUIS

MISSOURI

BRANCH OFFICES

ATLANTA
MR. E. N. MADDOX, 710 PEACHTREE ST.

NEW ORLEANS
MR. H. L. WOEHLER, BEINVILLE HOTEL.

Atlanta
Boston
New Orleans

Chicago
New York
Cincinnati

Omaha
Detroit
Philadelphia

Los Angeles
Seattle
Minneapolis

FERRO STUDIO, Inc.

DESIGNERS AND CRAFTSMEN
IN HAND FORGED AND LEAF HAMMERED
WROUGHT IRON

228 East 150th Street

New York City

Products

ARCHITECTURAL and ORNAMENTAL HAND FORGED AND LEAF HAMMERED WROUGHT IRON WORK of taste and character for the best class of residences, churches, banks, government and private buildings.

For Residences

Hand forged iron entrances, marquises, stair rails, dining room and conservatory grille doors, grilles, driveway gates, fences, console tables with mirror frames, flower tables, andirons, lantern and other luminaires.

For Churches

Hand forged iron altar rails, chapel screens, lecterns, fences, ornamental hinge plates, special hardware, weathervanes and crosses, lanterns and other luminaires.

For Banks

Hand forged iron bank screens, check desks, entrance doors, gallery railings, vault grilles, elevator doors, clock dials and hands, ornamental window guards, lanterns and other luminaires.

For Government Buildings

Hand forged iron entrances, screen enclosures, stair rails, elevator doors, ornamental window guards, flagpole holders, lanterns and other luminaires.

Workmanship

All our work is executed in the spirit of the iron masters of the middle ages, as they reached their climax in art, and in harmony with present day conception of their work.

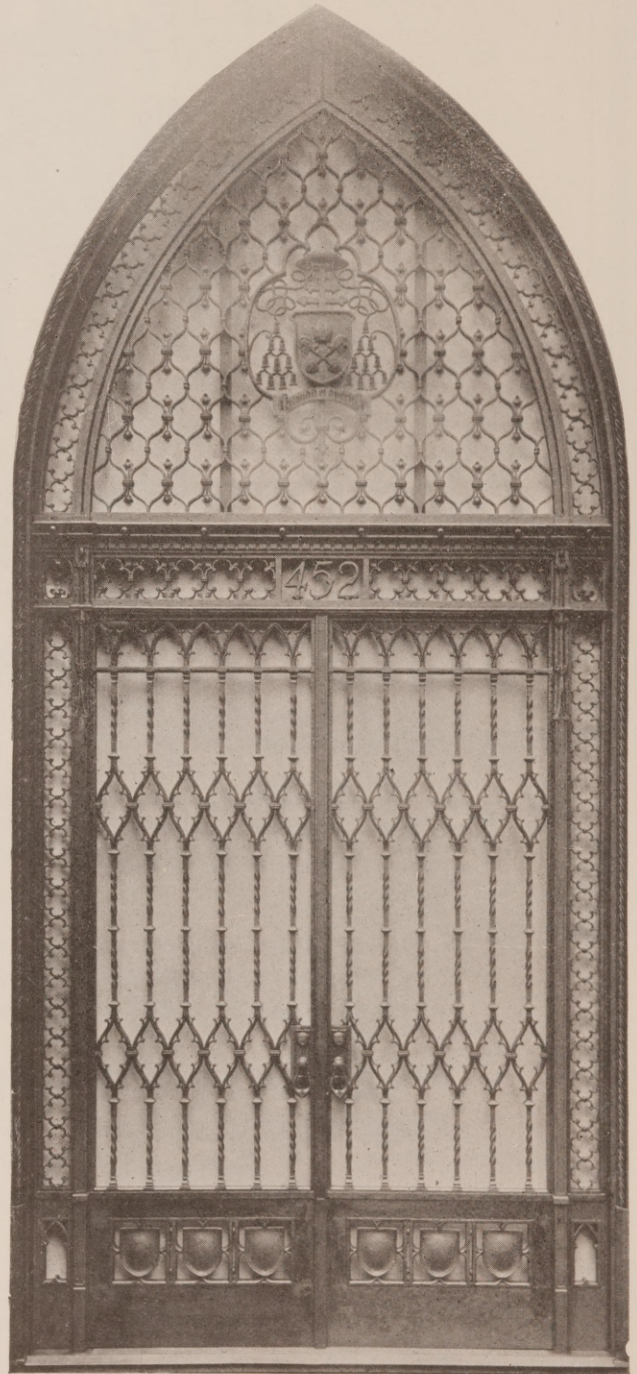
Estimates

This concern is prepared to furnish estimates from architect's sketches, drawings and specifications, and, if requested, will furnish sketches of their own, with price notations.

Co-operative Suggestions

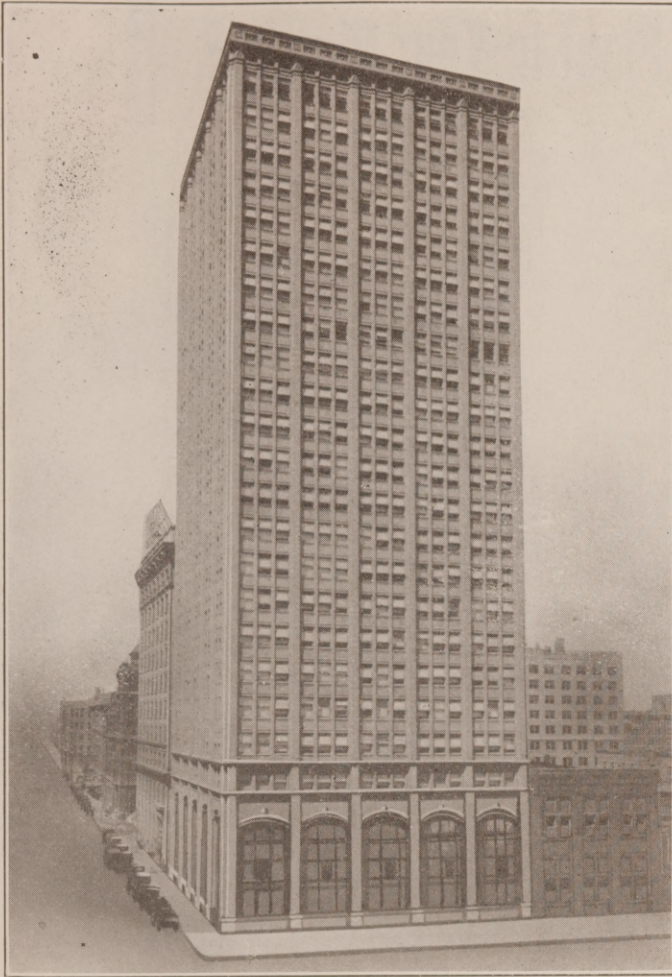
Architects are invited to submit to us all problems involving wrought iron work. Our facilities are offered in working out their designs and interpreting them in wrought iron.

Through an appreciative handling of the material, work that has distinction and character can be produced by us at moderate cost.



*Hand forged Wrought Iron Entrance
Residence of his Grace the Archbishop of New York*

Robert J. Reiley - - - - - Architect



*Farmers & Mechanics Bank Bldg.,
Fort Worth, Texas.*

*Architects—Sanguinet, Staats & Hedrick,
Fort Worth.*

*Elec. Contr.—Eugene Ashe Electric Co.,
Fort Worth.*

Our architect's service department will answer all questions pertaining to electrical installations, and will gladly supply samples for inspection. Write us for our catalogue No. 6.

The Connecticut Electric Mfg. Co.

Office and Factory: Bridgeport, Conn.

New York Chicago San Francisco

CONNECTICUT "A-1" DEVICES

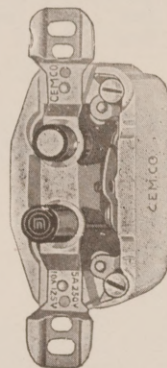
This Modern Building Equipped With Connecticut Material

This is one of the many large buildings throughout the country that are being equipped with Connecticut Wiring Devices.

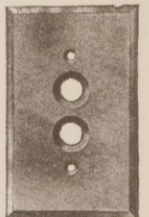
The unusually strong electrical and mechanical construction of Connecticut material insures long service and accurate performance.

Architects specify Connecticut material because—

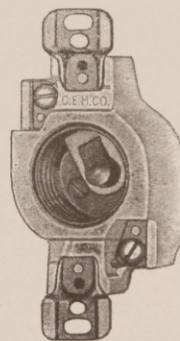
1. It is nationally known.
2. In actual service in many of the larger building developments.
3. The line is complete and offers the latest designs and improvements.



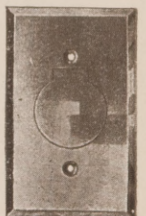
Push Button Switch
No. 6076



Push Button Plate
No. 7001



Flush Receptacle
No. 3010



Flush Receptacle Plate
No. 7061

Have You a Shope Brick Plant in Your District?

Shope Brick is a nationally known product. Its strength and durability have been proven and its beauty unquestionably surpasses any brick yet developed that can be practically manufactured. Forty Shope Brick plants are now being advantageously operated in the United States.

The patented Shope Process and specially designed machinery for manufacture, as well as the steadily increasing demand for "all around" construction brick that will meet every requirement for every kind of construction work, offers a real opportunity for the establishment of a Shope Brick plant in your district.

Shope Brick can be made in any community, as the three fundamental factors are sand, gravel and cement, which are obtainable in large quantities in every distributing center, thus providing an industry employing local workmen, facilitating deliveries and economizing on transportation costs.

Only one licensee to a given territory.

Illustrated catalog and full particulars sent on request.



SHOPE BRICK CO.

COMMON BRICK

FACE BRICK



Above—Kenton Masonic Lodge Building.

Below — Clinton Court Apartments, Walla Walla, Washington.



WADE PARK MANOR, CLEVELAND, OHIO

Geo. B. Post & Sons, Architects

John Gill & Sons, Builders

Entire Contract for Interior Decorations of the Wade Park Manor, Cleveland, Ohio

Executed by

W. P. NELSON COMPANY

N. J. NELSON, President

PAINTING DECORATING DRAPERIES

209 W. 33rd Street
New York

1514 Forbes Street
Pittsburgh

614 South Michigan Boulevard
Chicago

Buckley Building
Cleveland

We are now painting the Federal Reserve Bank, Fenway Hall, Union Trust Bank Bldg, Cleveland; the Schenley Apartments, Pittsburgh; the Beldin Hotel, Chicago; Preston Masonic Lodge, Louisville, Ky., Caldwell Bldg., Nashville; Ashland Nat. Bank, Ashland, Ky.

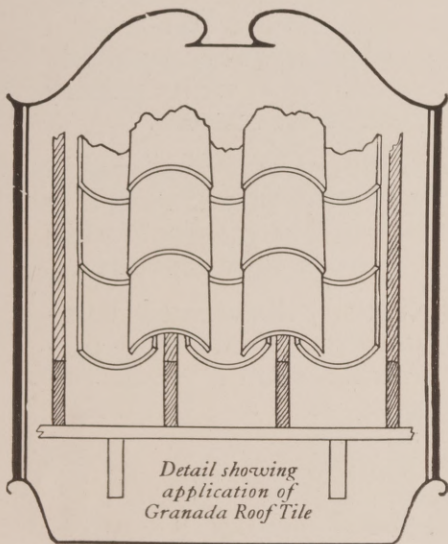


Detail of Residence, Evanston, Illinois. Perkins, Fellows & Hamilton, Architects

A DOUBLE stretcher Flemish Bond is seen in the field of this charming detail. The threefold rowlock arches and the exquisite pattern work in the broad belt course below and the wall above the windows show a fine treatment of brickwork. In "Architectural Details in Brickwork" you will find many other exam-

ples of artistic brickwork in which only standard brick are used. The half-tone plates, issued in three series, each in an enclosed folder ready for filing, will be sent to any architect requesting them on his office stationery.

Address, American Face Brick Association, 1758 Peoples Life Building, Chicago, Illinois.



Varicolor Granada Roofing Tile

BEAUTY is enhanced, monotone is relieved, colorful life is added, by the use of Varicolor Granada Roofing Tile.

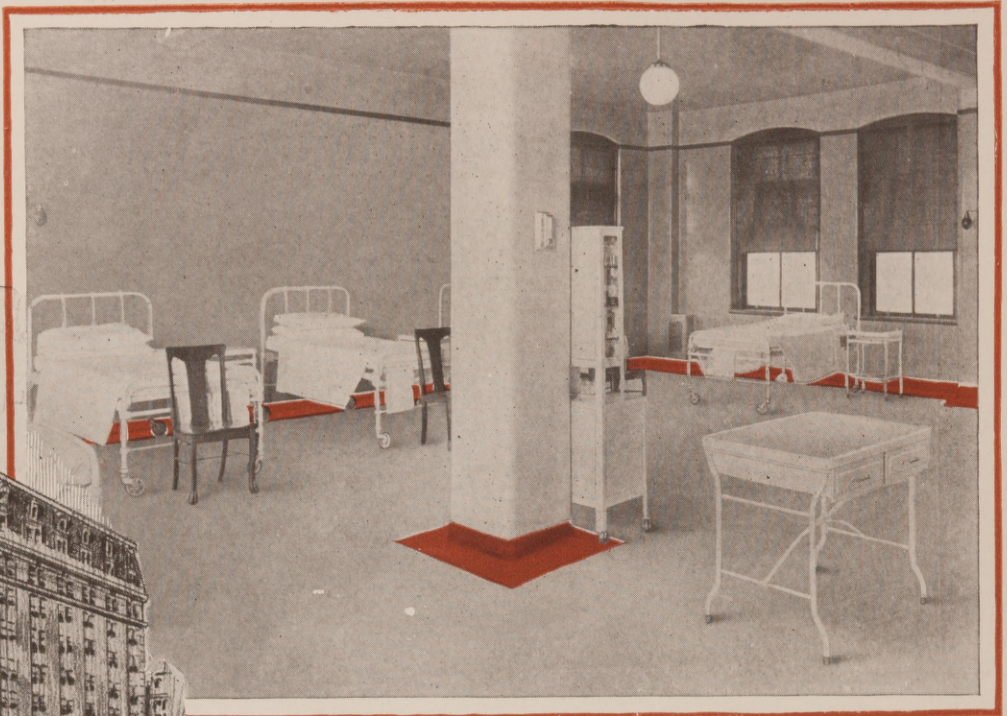
Widely varying tastes, as well as the most elusive color schemes, may be followed with harmonious blending of diversified colors, ranging from the medium dark shades of red to the rich purples, and from warm, golden hues to the metallic blue of gun metal.

Durable — fireproof — a non-conductor of heat and cold.



See pages 885 to 887
17th Edition.

"The Standard of Quality in Clay Products"
L.A. Pressed Brick Co.
 Los Angeles, California
 U. S. A.



The Ideal Hospital Floor —

TO the architect who is looking for the ideal hospital floor, we say, consider these outstanding features of Halicomp.

It is more sanitary than wood, concrete, marble or tile. It presents a smooth, dustless, unbroken surface over the whole floor, with sanitary cove eliminating all corners.

It is quiet, resilient, and comfortable to stand and walk upon. And it is far more lasting than maple flooring and less expensive than marble.

Halicomp is truly the versatile composition flooring for hospitals—useful alike in halls, rooms, wards, operating rooms, stairs and lavatories.



We have prepared a cabinet of actual samples of Halicomp flooring showing eight standard colors and giving complete specification data. A request on your letterhead will bring one to your office post paid.



HALICOMP

COMPOSITION
FLOORING

MANUFACTURED AND INSTALLED BY

Hachmeister-Lind Chemical Co., Pittsburgh, Pa., U. S. A.

CANADIAN PLANT—SARNIA, ONTARIO, CANADA

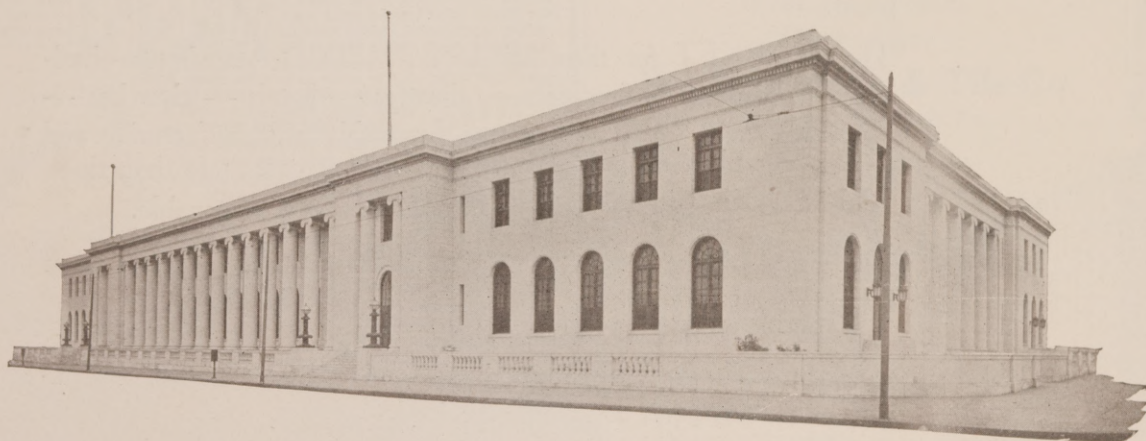


GEORGIA MARBLE

—as dependable as the U. S. Mail

FOR over a QUARTER of a CENTURY the United States Government has used Georgia Marble as a building material for its Post Office Buildings.

The Government's faith in Georgia Marble was again shown when this material was selected for the new Post Office at Birmingham, Alabama, here shown.



THE GEORGIA MARBLE COMPANY

TATE, GEORGIA

1328 Broadway, New York

456 Monadnock Building, Chicago

610 McKerchey Building, Detroit



\$1,500.00 Net Profit Per Month

IS THE LATEST REPORT

from one of our licensees. And it will increase—BECAUSE—**ALPHA DECORATIVE TILES** are replete with quality, can be manufactured at a surprisingly low cost, and sold at a handsome profit.

The **MARKET** for them IS **UNLIMITED**—storefronts—hallways — mantels — fireplaces — theatres — hotels — churches — swimming tanks. We instruct you thoroughly in manufacturing and sales—your plant equipment complete will not cost more than three hundred dollars, and the price of the license is very reasonable.

The above picture shows two typical stock mantels. The tiles can be produced in **ANY COLOR OR COMBINATION OF COLORS DESIRED**, with a glazed finish. They will never fade, check or crack, are easily washed, and grow better with age. Applications for territories now being received.

Alpha Tile Company

Thirty Church Street, New York City

BRADFORD REDS



BRADFORD REDS

Our Most Successful Year

For thirty years **BRADFORD REDS** have set the pace for other Face Brick manufacturers.

The year just closing proved the most successful one in our history.

It indicates beyond doubt that good old reliable **BRADFORD REDS** continue to gain in popularity.

This is due to their higher standard of Quality, superior Beauty and greater Value.

USE THEM IN 1924.

Write for Samples.

Do it today.

Bradford Brick & Tile Co.

2 Main St., Bradford, Pa.





The FA Residence Panelboard Safety Type
 Made With and Without Main Switch

A new, sectionally constructed, standardized, residence panelboard that is entirely a factory product; sold, complete with cabinet, in a package and stocked in standard sizes by jobbers in various parts of the country. It is an absolute safety type and costs less installed than any other residence panelboard ever built.

A Complete Line of Standardized Panelboards and Cabinets

Frank Adam

ELECTRIC COMPANY
 ST. LOUIS

Send for Bulletin

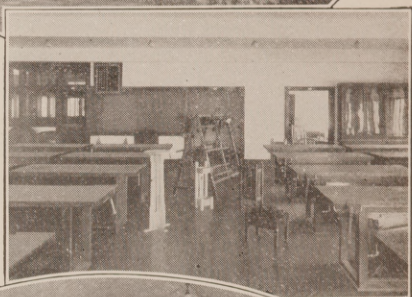
Send for Bulletin

CONSULT AN ARCHITECT BEFORE BUILDING



OAK FLOORS

have the quality, so rare in structural material, of inherent beauty. Nature grew a grain in oak that cannot be imitated; and in flooring this grain takes on a warm lustrous finish,—a delightful foundation for interior decoration.



In High School drafting and exhibit rooms Oak Floors have the two-fold advantage of beauty and durability.



Put your flooring problems up to our experienced flooring experts. We will gladly serve you.



See page 481, 17th edition.

FOR EVERLASTING ECONOMY

In Schools—
the floor is part of the working equipment

IT is subject to wear and tear, exactly as desks, tables, and other articles of school furniture. But it is part also of the decorative scheme of room interiors, to be treated with walls and ceilings as a decorative whole. An ideal floor must therefore combine in itself the qualities of *durability* and *beauty*. For these reasons the tried and tested school room floor is OAK.

Oak Floors are easily cleaned, an important factor where hundreds of feet track in dust and dirt daily. They are not cold, hard or "dead" beneath the feet, and relieve the strain of constant standing or walking. How

often have you seen people, where concrete or similar material is used, lay a piece of wood to stand on.

Oak floors remain in perfect condition in residences after a half century and more of use; they have stood the test of factory wear, under conditions much more severe than will be encountered in schools.

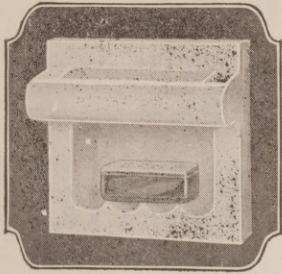
Specifying Oak Floors is true economy; low first cost, low up-keep, long satisfactory service.

The advantages of Oak Floors are fully brought out in literature available for your reference files, which will be sent you on request.

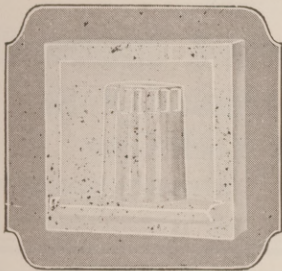
OAK FLOORING BUREAU, 1037 Ashland Block, Chicago

write for Bulletin now!

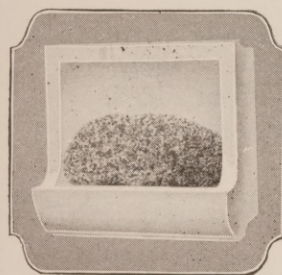
Why a tiled bathroom should have china fixtures



*Combination Soap Holder
and Safety Wall Grip*



Tumbler Holder



Sponge Holder

FOR covering bathroom walls, tile is the accepted standard but the fixtures built into these walls should be CHINA.

Tile fixtures, have a thinly glazed surface, which may craze within a few months. These cracks if filled with soap particles appear soiled and unsightly and are unsanitary.

Fairfacts Fixtures are made of solid snow-white CHINA. They are durable—they will even outlast the tiled walls and they never crack, craze or discolor.

Fairfacts Fixtures are made in a wide variety of styles, including many combination fixtures. They cover practically every possible need of the bath. The designs are simple, distinctive, and harmonious.

Fairfacts Fixtures are installed by tile contractors—the only trade that does this work—and should be included in the tile contract. We do not sell the plumbing trade.

*Send for Catalog F. Details and specifications
also appear in Sweet's Architectural Catalog.*

THE FAIRFACTS COMPANY, INC. *Manufacturers*

234-236 West 14th Street

Look for this



Dept. L, New York City

trade mark

Fairfacts Fixtures

BUILT IN YOUR BATHROOM WALLS

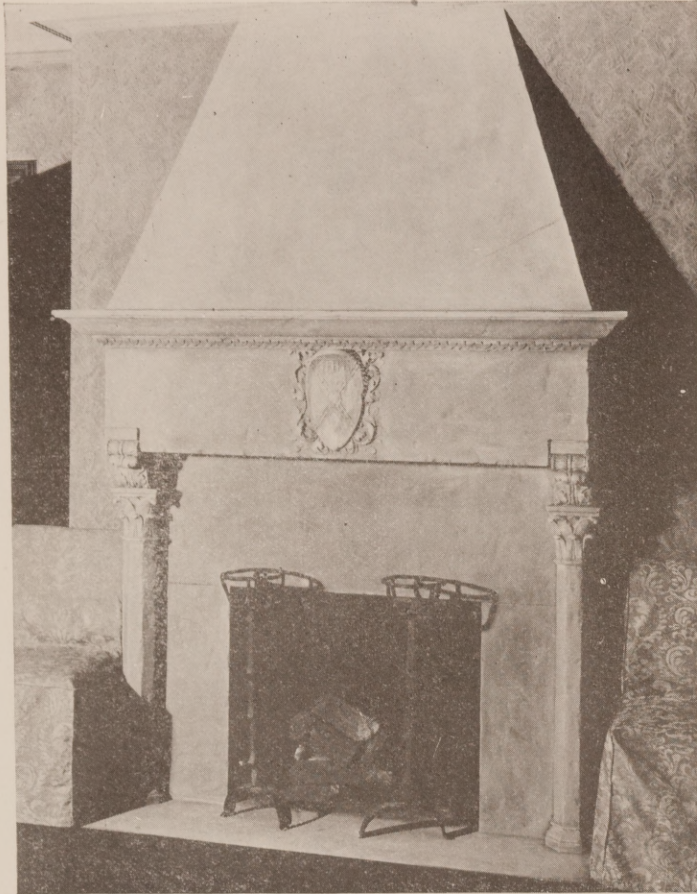


ILLUSTRATION: MANTEL
FROM DAVANZATI
PALACE, FLORENCE

ARTIFICIAL STONE MANTELS

MADE IN
IMITATION CAEN OR
LIMESTONE, TRAV-
ERTINE OR ANTIQUE
MARBLE

Jacobson Mantel & Ornament Co.
322-324 East 44th St.
New York City

LOUIS GEIB ARTHUR P. WINDOLPH

The 1923 Edition of WILLIAM ROTCH WARE'S

The GEORGIAN PERIOD

THIS new edition has been completely rearranged and reprinted with text matter and indexes condensed into one bound volume. Alphabetical, chronological, geological and text matter indexes have been added, together with a complete list of contributing architects and draughtsmen. Five portfolios are devoted to plates and measured drawings.

Measured Drawings

Measured drawings from a large portion of the plate section. Nothing that care can do has been spared to make these drawings useful and thoroughly practical for the decorator and architect. They cover in faithful detail every important element; porches, porticos, dormers, roofs, gables, interior staircases, proportion of openings—in fact, all essentials of the many subjects treated have been correctly recorded. The loose leaf arrangement permits the architect to work with freedom on any specific subject. Excellent printing on heavy coated paper also adds to the usefulness of these drawings.

Photographic Plates

Full-page half-tone reproductions give to this work a reality of inestimable value. The subjects pictured represent the finest examples of Colonial work executed in New York, Pennsylvania, South Carolina, Maryland and the New England States

during the latter part of the eighteenth and early nineteenth centuries. These plates form a necessary adjunct to the measured drawings.

Text Matter

The text matter is permeated with the flavor and spirit of Colonial times. It will give the reader an admirable idea of the social, political and pecuniary conditions that encouraged the construction of such interesting civic and private buildings. As a setting for incidents in Colonial history, this text matter is not only consistent but necessary in order that the architect may fully understand the meaning and spirit of this important period. Illustrations, both in line and in half-tone, further enhance the value of the text matter. Some of the original articles written by such distinguished authorities as Claude Fayette Bragdon, Olof Z. Cervin, George Clarence Gardner, C. R. S. Horton, E. Eldon Deane and many others are reproduced in their entirety.

Sent on Ten Days' Approval—Partial Payment Terms Upon Request

U. P. C. BOOK COMPANY, Inc.

Successors to the
AMERICAN ARCHITECT BOOK DEPT.

239 West 39th Street

NEW YORK



RODDIS LUMBER & VENEER COMPANY,
Manufacturers of Flush and French Doors
for Hotels, Apartments, Public Buildings, Dwell-
ings, Schools and Hospitals.

RODDIS DOORS are guaranteed not to warp,
swell or shrink; they are fire-resisting, sanitary,
and soundproof; they cost no more than any ordi-
nary good door.

Made in all woods, plain or inlaid.

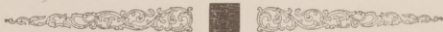
We are the originators of the flush door in a com-
mercial way.

Send for catalog and sample section showing our
construction.

Estimates cheerfully furnished.

Roddis Lumber & Veneer Co.

Department D,
Marshfield, Wisconsin



Old European Slate Roofs



A STONE ROOF of rough texture, extreme thickness, graduated exposures of courses and a wide range of soft colors, including varying shades of green, grey, purple and black.

Send us your elevation and we will outline two or more roof suggestions without cost.

KNICKERBOCKER SLATE CORP.

E. J. JOHNSON, Pres.

153 East 38th Street, New York, N. Y.

STANDARD ROOFING SLATE—BLACKBOARDS—STRUCTURAL SLATES—GARDEN WALKS

This Mark is the Symbol of

Good
Quality
Prompt
Service



Fair
Treatment
Honest
Values

WE SELL TO DEALERS ONLY

We can furnish in the same car, mixed orders, containing any of the following:

HAIR FIBERED PLASTER
UNFIBERED PLASTER
WOOD FIBERED PLASTER
PLASTER PARIS FINISH
MOULDING PLASTER
BEST BROTHERS KEENE'S CEMENT

Any of the above items can be shipped in jute or paper bags, except Keene's Cement, which is shipped in jute only.

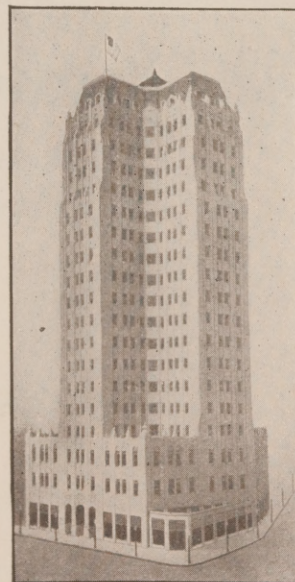
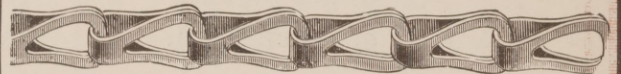
We retard Texas plaster to suit conditions in your locality

TEXAS CEMENT PLASTER CO.

OKLAHOMA CITY, OKLA.

THE LARGEST PLASTER MILL IN THE SOUTH

ORIGINATORS OF SASH CHAINS "Giant Metal," "Red Metal" and Steel



MEDICAL ARTS
BUILDING,
DALLAS, TEXAS,
SHOWN HERE
CONTAINS
16,000 FEET
OF OUR

No. 2 "Red Metal" SASH CHAIN

SEE PAGE 1253,
SWEET'S CATALOG,
18th EDITION, AND
SEND FOR OUR A1
SASH CHAIN
CATALOG

The Smith & Egge Mfg. Co.
Bridgeport, Conn.

H. R. & C. R.
CANNON
OWNERS.

Operating

The Cecil Hotel, Atlanta
Terminal Hotel, Atlanta
Georgian Hotel, Athens



G. LLOYD
PREACHER
& COMPANY

ATLANTA
AUGUSTA
RALEIGH

Architects & Engineers.

The HENRY GRADY HOTEL

KITCHEN PLANS for Atlanta's newest and most elegant commercial hotel were prepared for the architects by the engineering department of the *Wright Company, Inc.*, the South's leading supply house for the equipment of dining rooms and kitchens of hotels, restaurants, cafes, cafeterias, colleges and public institutions of all kinds.

FREE PLANNING SERVICE

THIS SERVICE consists of a complete set of blue prints showing the exact location of ranges, steam tables, sinks and all other items of heavy equipment in the kitchen, pantry, bakery and any other service rooms desired; together with a plumbing plan of all hot and cold water, gas, steam and sewerage connections. These blue prints are all ready to be placed in the hands of the contractor.

HOW TO SECURE IT.

ANY ARCHITECT will be furnished these plans entirely without charge or any obligation on his part. All he has to do is to forward specifications of the space allotted the kitchens, pantries, storerooms and dining room, together with information as to the number of persons to be accommodated at one time in the dining room, and the particular type of service to be employed. Plans will be returned promptly.

LEADING ARCHITECTS THROUGHOUT THE SOUTH ARE USING THESE PLANS.

For full information regarding this service address

Kitchen Planning Dep't,

The WRIGHT CO., Inc.

185 Peachtree St.

ATLANTA





Genuine "BANGOR" Slate Roofs

Rich **BLUE-GREY SLATE**
of the highest quality

"Genuine Bangor" Slate has been produced in the famous quarries at Bangor, Pennsylvania, for over sixty years and hundreds of thousands of roofs testify to their quality—not a single instance is known where "Genuine Bangor" Slate has gone wrong.

"Genuine Bangor" Slate is sold under two classifications "CLEAR" and "SEMI-CLEAR"—the quality is the same—the appearance on the roof is identical, *but*, the cost of Semi-Clear is very low.

"Genuine Bangor" Semi-Clear Slate is specified by the United States Government on numerous structures—it is now being applied on the U. S. Veterans' Hospital buildings at various points and other projects of a similar character.

"Genuine Bangor" Slate is world-renowned and is constantly shipped to England, Ireland, Australia, New Zealand and even to Wales, the greatest slate-producing country in the world.

"Genuine Bangor" Slate is quarried on the "Genuine Bangor" vein by the following companies:

North Bangor Slate Company
Old Bangor Slate Company
Bangor Central Slate Company
Bangor-Vein Slate Company
E. Bangor Consolidated Slate Co.
Bangor Washington Slate Company
Bangor Excelsior Slate Co.

NOTE: "Genuine Bangor" Slate needs no further recommendation than its name. To protect architects and users against the substitution of inferior grades, the producers have formed the "Bangor Slate Association," and with all shipments of "Genuine Bangor" Slate is furnished a certificate of the Association. It is safe to assume that any slate offered under any name hyphenated with Bangor, such as West Bangor, Albion-Bangor, Jackson Bangor, Northampton Bangor, or any other prefix to the word Bangor except "Genuine Bangor" is a substitution of inferior material.

The entire production of the above named companies is sold exclusively by

V **VENDOR SLATE CO.** **V**
INCORPORATED
EASTON, PENNSYLVANIA

LARGEST SHIPPERS OF ROOFING SLATE IN THE WORLD
New York Office, 103 Park Ave.
Chicago Office, Marquette Bldg.

Columbus (Ohio) Office, 500 Atlas Bldg.
St. Louis Warehouse, 1548 So. Vandeventer Ave.
Pittsburgh Warehouse, 6600 Hamilton Ave.
Hartford (Conn.) Office, American Industrial Bldg.
and at Detroit, Kansas City, Los Angeles,
Cincinnati, Waco (Texas), and London, England
Washington, D. C., Office—New York Ave. & 14th
St., N. W.

The Public Doesn't Care— until the accident occurs!

THE public goes merrily on, crowding into elevators against the warnings of the operator and his best efforts to prevent them. They don't care if the door is partly open or the elevator has started, they will try to get on or off just the same. And all is well—until someone gets hurt, then the accusing finger is pointed at the manager or owner of the building, whose only fault is one of omission.

The most careful vigilance goes for naught because no one can anticipate what the traveling public will do. To prevent accidents *mechanical prevention* must be used.

The M-C-K Elevator Locks lock the door when the power is on, lock the power when the door is open, do not unlock doors in passing floors and insist that the car be at a standstill before the door is opened.

M-C-K safety is proved by hundreds of installations—its structural superiority is okayed by the Underwriters' Laboratories, and *they do not slow down elevator service.*

*Please let us give you the facts.
Write for booklet and permit
us to estimate your job.*

ELEVATOR LOCKS COMPANY

General Office and Factory:

PEORIA, ILLINOIS

BRANCH OFFICES:

WASHINGTON—1407 L Street N. W.

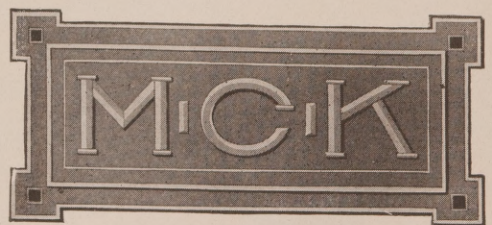
BALTIMORE—814 American Building

CLEVELAND—1940 East 6th Street

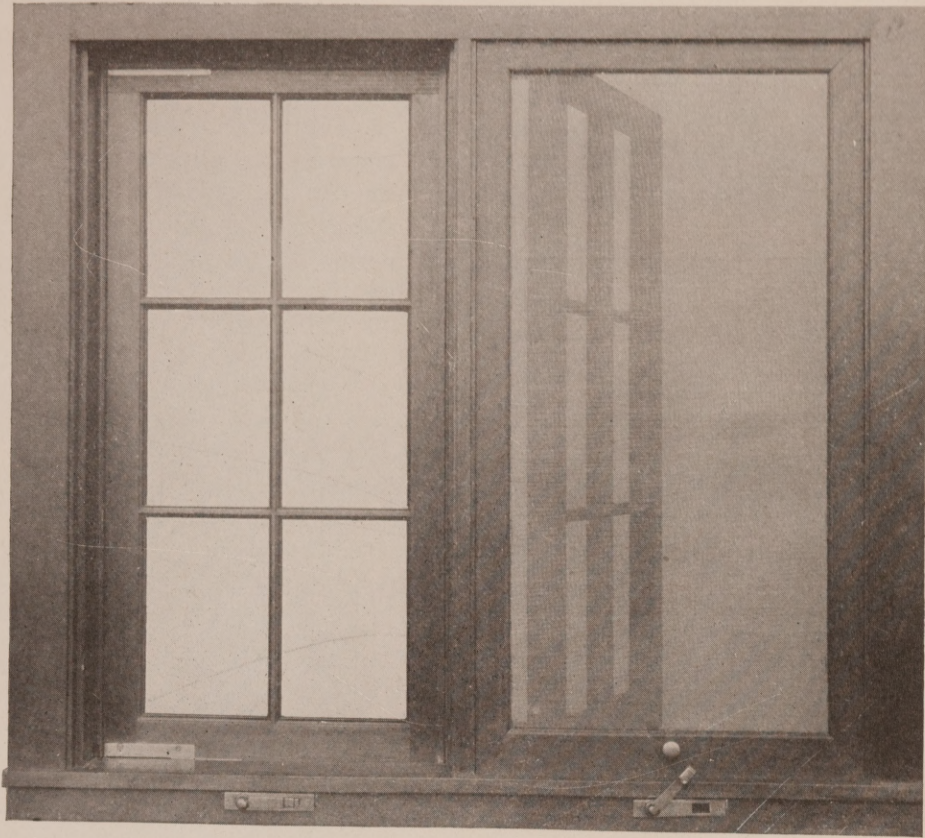
CHICAGO—22 West Monroe Street

NEW YORK—Grant Elevator Equipment
Corp., 101 Park Ave., Agents

Absolute Safety



at Elevator Doors



THIS WINDOW OPERATES WITHOUT MOVING SCREEN.

The Carrier Quadrant Adjuster, in itself complete window hardware, pivots this outswinging window four inches from the edge of the sash and permits it to be opened and closed without moving the screen, by turning the small hand-lever shown.

The Adjuster automatically locks the window in any position, neither hinges nor fasteners being required. It cannot rattle, sag nor slam. When open, the window may be easily cleaned on both sides from within the room.

*Sweet's and Architects'
Sample Corporation,
New York.*

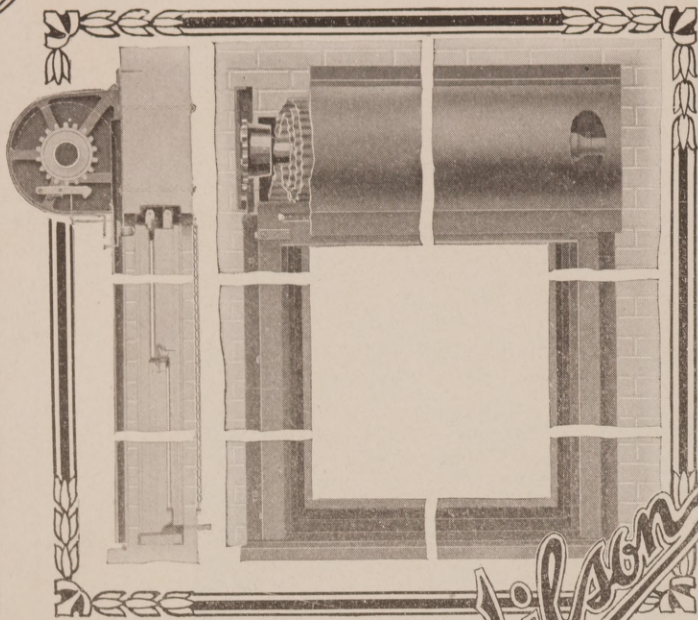


*Ask us to send you our
Descriptive
Architectural Leaflet.*

CARRIER ADJUSTER COMPANY

Casement Window Hardware

Jacksonville, Florida



Wilson Gravity Closing Shutter. Note chain which allows of operation from inside of building.

Wilson

Protection Against Fire from Adjoining Buildings

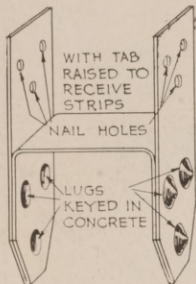
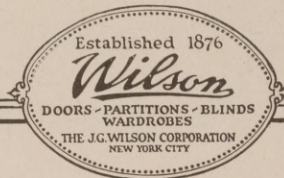
IF YOURS is a problem that has to contend with fire in adjacent buildings, we recommend for your consideration our gravity closing shutter. It is entirely self closing either through the fusing, at approximately 160 degrees, of a link on the outside of the building, or it can be closed by hand from inside the building by merely unhooking a chain which holds the automatic device in check. In either event the closing is automatic and positive. After closing, new link can be inserted and the shutter reset from inside of the building.

Send for our new catalog No. 12 which fully describes the entire line of Wilson Steel Doors and Shutters.

The J. G. WILSON Corporation

11 EAST 36TH STREET, NEW YORK CITY

OFFICES IN ALL PRINCIPAL CITIES



For free sample and descriptive booklet please write or phone your nearest distributor—

ATLANTA, GA.
Robert S. Fiske,
701 Healey Bldg.

BIRMINGHAM, ALA.
Beecroft-Mallory Sales Co.,
Inc.,
420 N. 21st St.

NEW ORLEANS, LA.
Ole K. Olsen,
822 Perdido St.

MEMPHIS, TENN.
J. H. Miller & Co., Inc.,
544 Madison Ave. Bldg.

NASHVILLE, TENN.
Geo. W. Ruth & Co.,
61 Arcade

JACKSON, MISS.
General Builders Supply Co.

CHATTANOOGA, TENN.
T. T. Wilson Co.

STOCK CARRIED IN
ATLANTA

BULL DOG CLIPS

ARE MADE FOR ONE PURPOSE ONLY—TO ATTACH WOOD FLOORS TO CONCRETE—AND THEY DO THIS WELL!

BULL DOG FLOOR CLIPS not only anchor the wood floor to concrete base with perfect security but they do it more economically than other methods.

The following letter is only one of a great many we have received from architects and contractors:

Dallas, Texas.

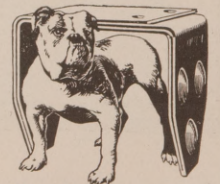
Gentlemen: I am now using your Bull Dog Clips in the High School, Hillsboro, Texas, and contemplate using them on future work. The clip system appeals to me as being practical and economical, and the contractors confirm my opinion.

T. J. GALBRAITH,
Architect.

THEY WILL WORK JUST AS WELL
FOR YOU.

The Bull Dog Floor Clip Co.

Winterset, Iowa



Put the BULL-DOG
on your Pay-roll

Two more Modern Fixtures of our "Avon" Semi-Vitreous Porcelain COMBINATION BATH

SEAT BATH, FOOT BATH
SHOWER BATH, CHILD'S BATH

Dr. Herman M. Bundesen, 7414 Oglesby Ave., Chicago, Ill., installed one of these fixtures in his new residence a year ago, and remarks as follows:

"It is the best fixture I ever saw, and I would not be without it for anything. It is most economical in the use of hot water, and this is a decided advantage where instantaneous water heaters are used. Furthermore, it is an ideal tub where there are children, as it can be used to great advantage as a foot bath when the children come in dirty from playing. The shower feature is also an advantage which I greatly enjoy. In fact this tub is most acceptable in every way, and I most thoroughly recommend the fixture."

Mr. O. R. Roenius, Secretary and Manager of the American Carbonic Machinery Co., Wisconsin Rapids, Wis., writes:

"It gives me great pleasure to acknowledge receipt of your good favor of the 15th and say to you that we are very much pleased with the combination bath tub installed in our new home. It is the first one of its kind here in the city, and has made a decided hit with everyone who has seen it. I personally like common sense practical things; consequently, I like this tub. It is convenient, very accessible, takes up little room, and looks well in the bath room. I am very glad to express to you this entire satisfaction."



WHEELING

DUPLEX

Semi-Vitreous Porcelain ware

TWO-IN-ONE URINAL STALL

For compactness and adaptability there is no urinal equipment that can equal the "DUPLEX."

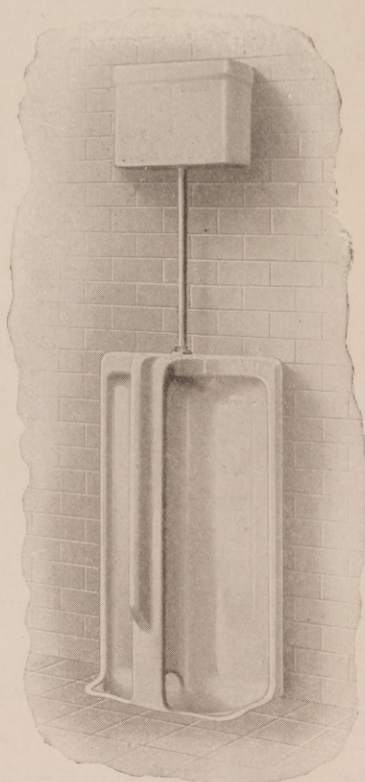
It is a one-piece fixture that saves considerable on first costs, freight and roughing in work.

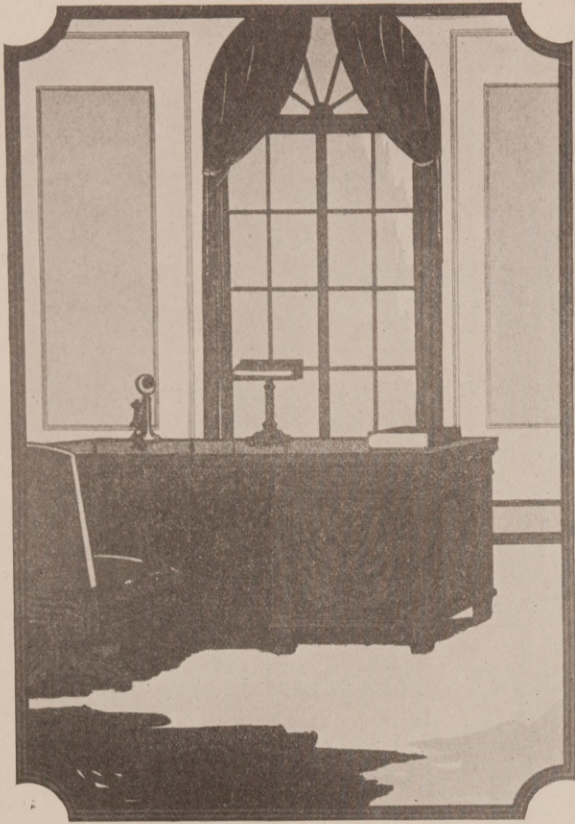
Crated, it weighs 50% less than any battery of two single stalls, and there are no unsightly joints to mar its appearance and create an unsanitary condition.

The "DUPLEX" is especially adaptable to schools and public comfort stations, or any place where two or more stalls are required.

Ask any jobber of plumbing supplies or plumber for complete details, and write us for descriptive circulars.

Wheeling Sanitary Mfg. Co.
Wheeling, W. Va.





ALWAR DESK CO., Inc.

EQUIPMENT ENGINEERS
 SPECIALISTS BANKING ROOM
 EQUIPMENT
 CARPETS, DRAPES.
 SPECIAL SERVICE BUREAU FOR
 ARCHITECTS.

35-39 45th ST. WEST.
 NEW YORK, N. Y.

Distributors famous

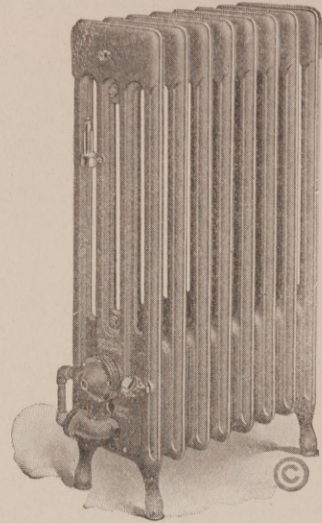
"RISHEL" Desks

A few representative installations

American Bond & Mortgage Co.
 E. Regensburg & Sons
 Chatham & Phenix Natl. Bank
 Corn Exchange Bank
 National Bank Watervliet
 Exchange National Bank, Castleton, N. Y.
 Amalgamated Bank
 Title Guarantee & Trust Co.
 First Natl. Bank, Bound Brook, N. J.
 Crowell Publishing Co.
 Lynch Construction Co.

CLOW

STEAM HEAT WITH GAS



38-Inch 4-Column Gasteam Radiator
 Also made in 22 and 26-inch heights

EVERY city in the South is using large numbers of Clow Gasteam Radiators for heating every type of building new or old. Wherever gas is to be obtained this method of heating is very desirable and economical. Comparative cost figures will be gladly given. Its advantages for heating in the South are evident.

CLOW "GASTEAM" GIVES

Steam Heat Without Coal

No excavation — Cellar or Chimney—No Dust—Dirt—or Ashes.

Steam Heat when and where it is wanted.

Let us send you a catalogue showing installation in every large City of the South.

JAMES B. CLOW & SONS

534-546 SOUTH FRANKLIN ST.

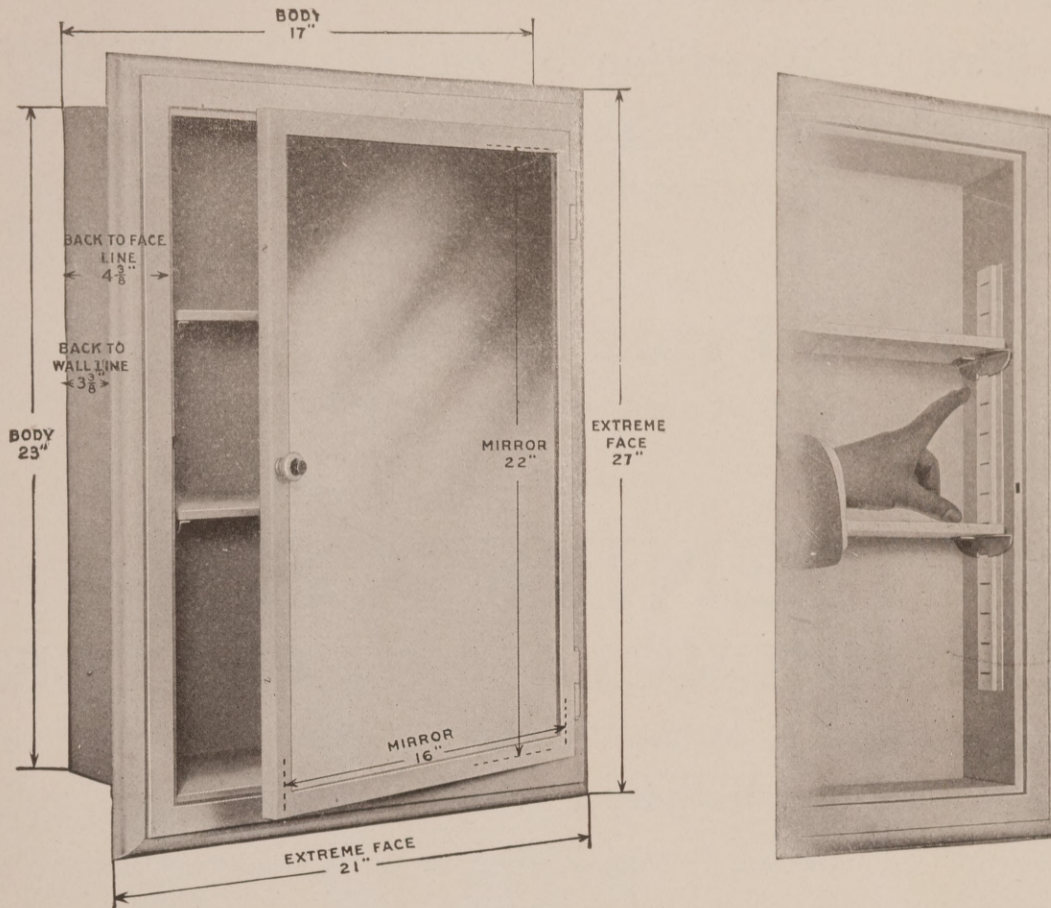
CHICAGO, ILL.

Offices in all principal cities

WHITE

The Brasscrafters

One-Piece Steel Medicine Cabinets



GRAPHIC ILLUSTRATION

Dimensions and roughing measurements.

Extreme of Moulded Edges	21 in. x 27 in.	Wall Line to Face	1 in.
Body	17 in. x 23 in.	Wall Line to Back	3 3/8 in.
Mirror, without Bevel	16 in. x 22 in.	Opening required for installation	17 1/4 in. x 23 1/4 in. x 3 3/8 in.

Some of the reasons why more and more architects

are specifying **WHITE** cabinets

The cabinets are made entirely of steel secured from corrosion by application of a process approved by the U. S. Government.

The durable finish is the **WHITE**. The shelf rests are securely fixed, but instantly adjustable. (Note sectional cut.)

The two shelves are pure white Vitrolite glass, impervious to acids and chemicals.

The mirror door is plain French plate glass in seamless metal frame, with moisture pad, flush-fitting metal back, china knob in combination with spring catch, concealed hinge flanges, and loose pin for convenience in detaching the door.

The body and moulding are integral, or are made so by oxyacetylene welding, thus securing a cabinet without joints, seams or cracks.

The cabinets require no finishing, either inside or outside, at the building. They are delivered ready for immediate installations, which is completed by using two wood screws in holes provided in the middle of the vertical sides.

Guaranteed satisfaction.

The makers of these cabinets are the makers of the well-known line of **WHITE** Bathroom and Lavatory Accessories.

Send for Hand-Book

J. P. EUSTIS MANUFACTURING COMPANY

CAMBRIDGE "A"

TRADE MARK
The Brasscrafters

(BOSTON) MASS.

ANNOUNCEMENT

The 32nd (1924) edition of HENDRICKS REGISTER
Considerably enlarged and revised from cover to cover
Now ready for distribution

Price \$15.00

Order at once to obtain early delivery.

HENDRICKS COMMERCIAL REGISTER

*of the UNITED STATES
for BUYERS and SELLERS*

ESPECIALLY DEVOTED TO THE INTERESTS OF THE

ELECTRICAL, ENGINEERING, HARDWARE, IRON, MECHANICAL, MILL, MINING, QUARRYING, CHEMICAL, RAILROAD, STEEL, ARCHITECTURAL, CONTRACTING AND KINDRED INDUSTRIES

Indispensable as a Buyers' Reference for Contractors, Engineers, Exporters, Government Departments, Jobbers, Manufacturers, Municipalities, Purchasing Agents, Retailers, Architects, and for Factories, Foundries, Machine Shops, Mills, Mines, Plantations and Railroads. Also Valuable for Preparing Mailing Lists.

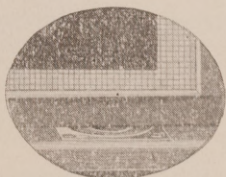
S. E. HENDRICKS CO., Inc. 70 Fifth Avenue

NEW YORK



Win-Dor

**Casement
Window
Operators**



*Sill Plate on Flush Type.
Operating handle detached.*

For Sleeping Rooms and Porches

OUTSWUNG casements can be placed at every angle to catch every vagrant breeze and deflect it inside. All three styles of Win-Dor Operators work from inside the screen, and self lock at any position.

On the Flush Type, the sill plate is countersunk and operating handle detachable. Made in bronze only. Other types in steel and iron.

Booklet and specification sheets.

The Casement Hardware Co

233 Pelouze Bldg.

Chicago, Ill.



Reasons For Its Economy

There are at least four outstanding reasons why this greenhouse built this way and this width is decidedly economical. No room to give even one of them here. But will gladly write you about all four. Send for printed matter.

Hitchings and Company

HOME OFFICE AND FACTORY, ELIZABETH, N. J.
New York Philadelphia Boston—9
101 Park Ave. 13th & Walnut Sts. 734 Washington St.



Electric Clock Systems

IN YOUR SCHOOL BUILDINGS WILL
ASSURE YOU OF HAVING THE BEST

Advantages

WE have catered exclusively to school building requirements for many years.

We manufacture the *highest quality*, the *most economical*, the *most reliable*, the *simplest*, the *most flexible*, the *most serviceable* Electric Time and Program Clock System made.

Our maintenance costs are the lowest of all makes of systems.

We invite and challenge comparisons to prove the above statements.

Specifications

Our Engineering Department is at your service.

Send us your preliminary plans, let us prepare detailed specifications, conduit and wiring layouts for your general electrical specifications.

Some Users

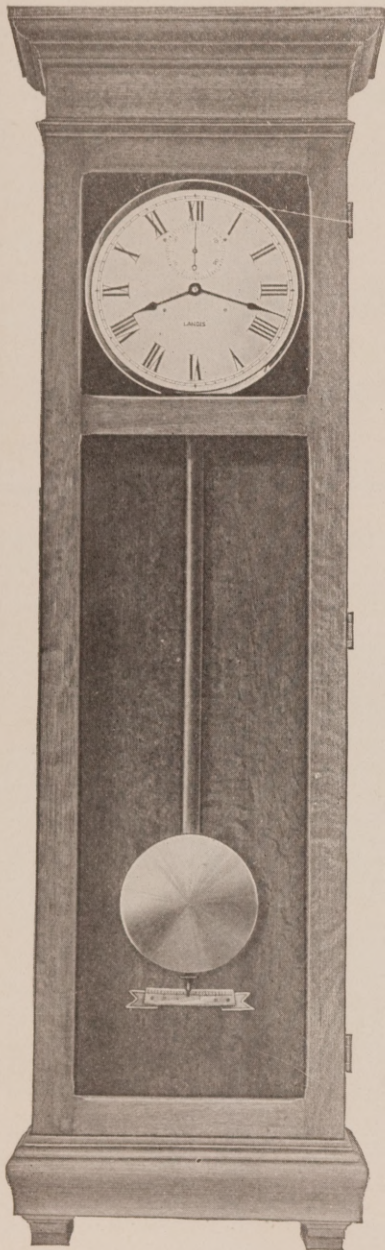
- Board of Education . . . Philadelphia, Pa.
125 Installations
- Board of Education . . . Baltimore, Md.
15 Installations
- Board of Education . . . Butte, Mont.
7 Installations
- Board of Education . . . El Paso, Tex.
5 Installations
- Board of Education . . . Durham, N. C.
2 Installations

Installations by the thousands over every state in the Union. Can refer you to numerous users in your immediate vicinity.

Send for Our Complete Catalog

Manufactured by

LANDIS ENGINEERING & MFG. CO.
WAYNESBORO, PA., U. S. A.



60 Beat Self-Winding Master
Regulator, Wooden Rod and
Metal Bob Pendulum.
Style A60T



Red Front Furnaces

THE furnace that is going to give you the best profit next season—that's your question right now. That furnace will be the one that will give you the highest quality at a price that is consistent with quality yet *right*.

Production lowers cost and increases quality—the Red Front Furnace is a *quality product at a quantity price*.

A short examination will show you why this furnace is in demand. You don't sell a skimped product when you sell your customer a Red Front Furnace.

The illustrations give you an idea of their massiveness. The best grey iron obtainable is used, all the castings are extra heavy and the furnace as a whole is properly proportioned both for correct heating and long life.

Give your customers this better quality—with better profits

In the Red Front Furnace you'll find that ideal heater you want to sell and your customers want to buy. The many quality features are best explained in our catalog—write today and let us explain in detail this superior construction.

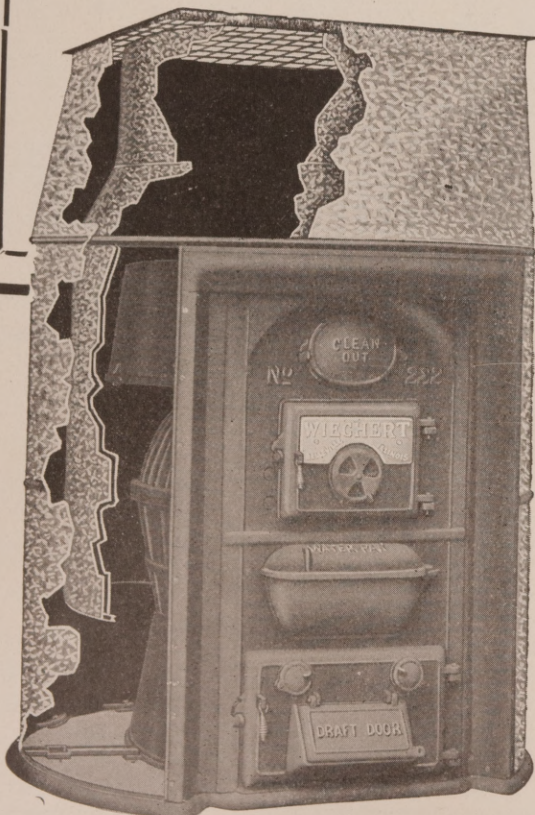
The Red Front agency for your territory should go to you—you'll want it when you compare Red Front quality and Red Front prices with your present line.

CHICAGO DISTRIBUTOR

Red Front Furnace & Supply Co., 149 W. Austin Ave., Chicago, Illinois

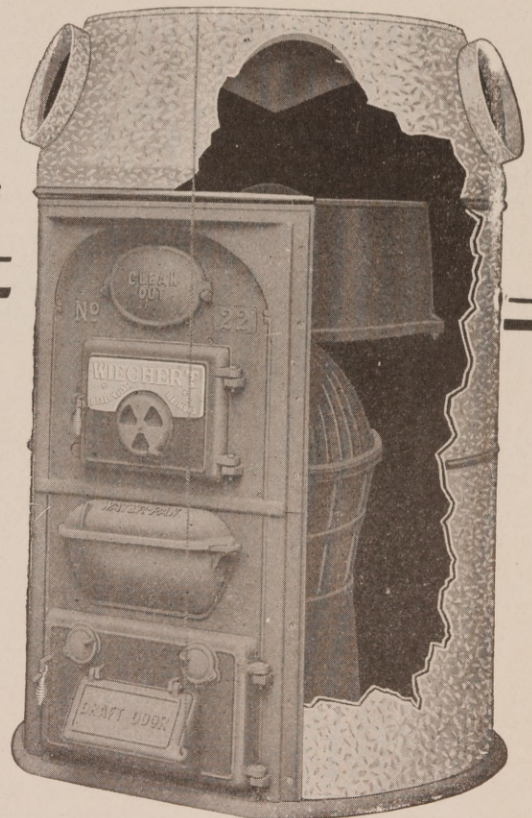
St. Clair Foundry Corporation

Belleville, Illinois



*Pipe
and
Pipeless*

Every
Furnace
fitted,
mounted
and
examined
before
leaving
foundry



I-X-L "SPRINGLESS" PRESSURE WATER CLOSETS

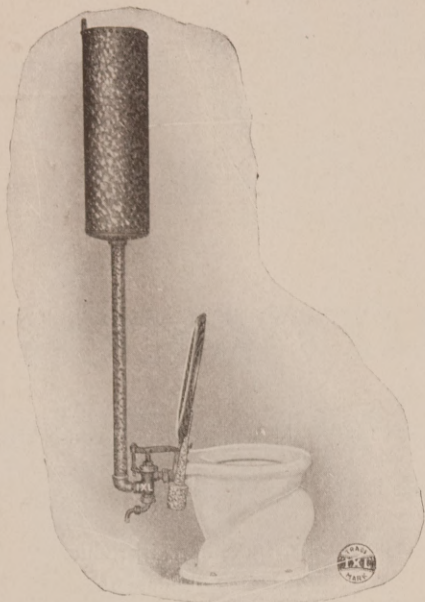
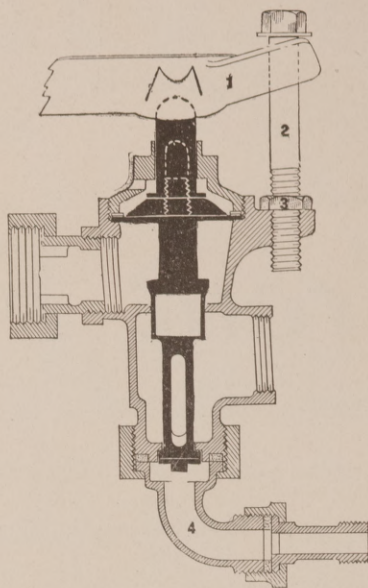


PLATE 300-D



SECTIONAL VIEW

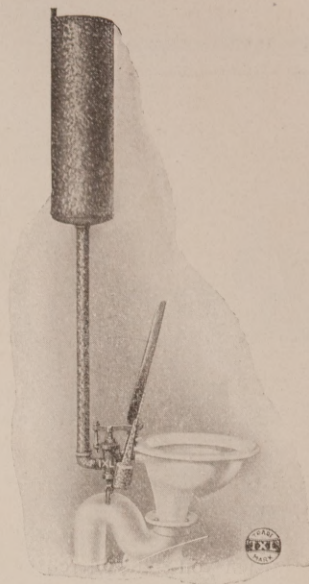


PLATE 301-D

DURABLE AND LOW PRICED CLOSETS FOR MILLS, FACTORIES, SCHOOLS OR PUBLIC PLACES.
NO STRAIN ON CLOSETS OR VALVES
NO SPRINGS OR COMPLICATED PARTS.

CHECK VALVE FURNISHED IN SUPPLY, PREVENTING ONE CLOSET ROBBING THE OTHER
ONE FLAT LEATHER SEAT WASHER ON SUPPLY

GUARANTEED FIVE YEARS.

GUARANTEED FIVE YEARS.

Manufactured by

THE "I-X-L" PUMP & MFG. CO., INC.

957 to 961 N. 9th STREET

::

PHILADELPHIA, PA.

ALLEN AIR-TURBINE VENTILATOR

The Acknowledged Most Efficient Ventilator Produced

Wherever ventilation is desired—in factories, foundries, stores, schools, hotels, churches, theatres, residences, kitchens, bakeries, tanneries, barns, stables, garages, chimneys, air shafts, or wherever air circulation is required Allen Air-Turbines have proven the best, cheapest and most efficient ventilating system known.

The Allen Air-Turbine is a true rotating air-driven suction turbine. It pulls air up and discharges it "through the roof." It works AUTOMATICALLY, CONSTANTLY, SILENTLY—day and night, week days, Sundays, Holidays.

NO OPERATING EXPENSE

The first cost of an Allen Air-Turbine Ventilator is the final cost. There is no operating expense. Once installed it requires no attention—no care—no adjusting.

EFFICIENCY GUARANTEED

There's no guess-work, no question, no doubt as to its efficiency. Its ability to displace is positive, constant, dependable, measurable and guaranteed.

WORKS IN ALL WEATHER

Allen Air-Turbine Ventilators operate under all weather conditions, unhampered and unaffected by snow, ice, sleet or rain. THEY ARE POSITIVELY LEAK PROOF.

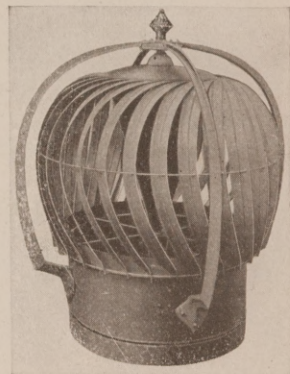
NO DOWN DRAFT

The powerful upward suction force of the rotating turbine make down drafts in the Allen Air-Turbine Ventilator a mechanical construction impossibility.

CHEAPEST—BEST

Allen Air-Turbine Ventilators provide the cheapest, best and most efficient method of obtaining positive and practical ventilation known—combining all the merits of power driven systems but without the heavy initial cost and continuous operating expense, care and up-keep.

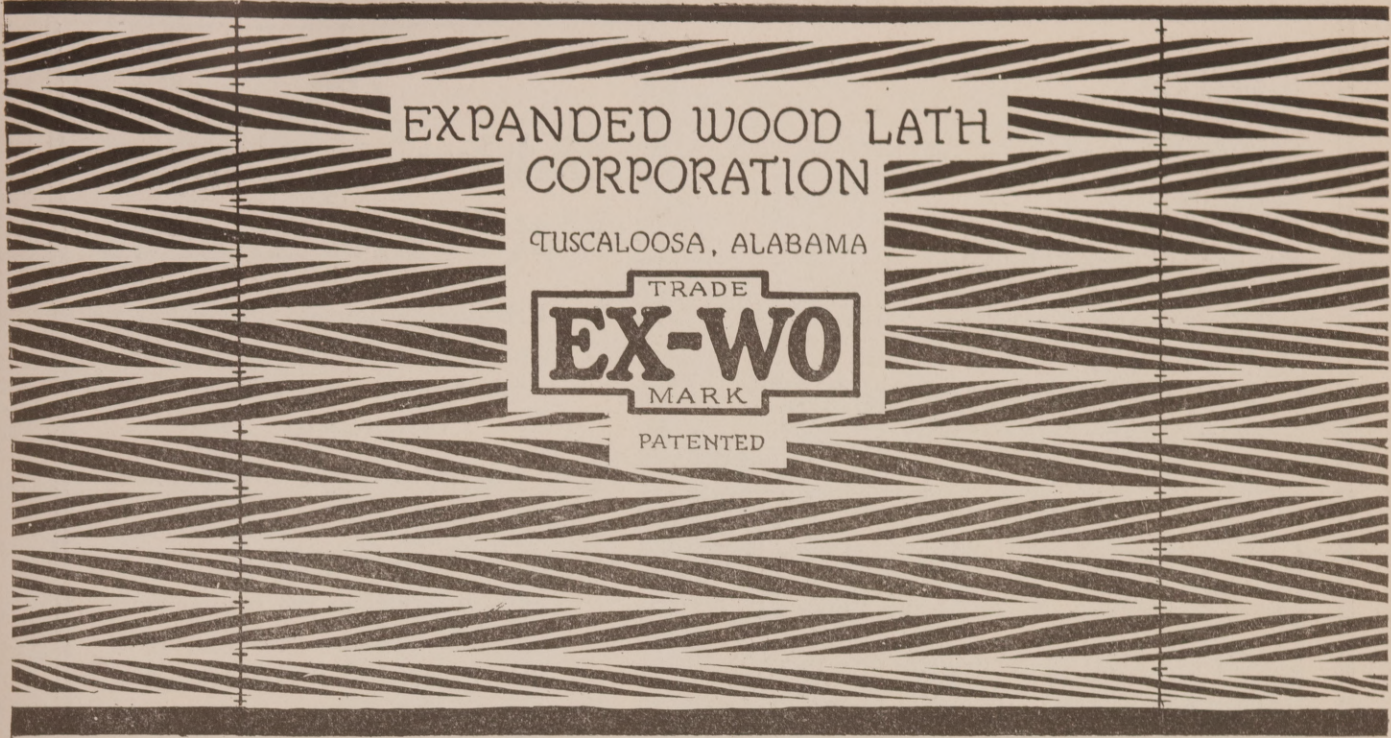
WRITE FOR DETAILED LITERATURE



Patented

Carries off
GASES
MOISTURE
STEAM
SMOKE
VAPOR
FOUL AIR
ODORS
HEAT
FUMES
DUST
DAMPNESS

ALLEN AIR-TURBINE VENTILATOR COMPANY
DETROIT Porter and Eighth Sts. MICHIGAN



Expanded Wood Lath PROVED STIFFER THAN STANDARD CONSTRUCTION

Comparative tests made by Robert W. Hunt & Co., Engineers

Results of Test

Actual Movement of Upper Sill

Load Applied in Pounds	A-Lath and Sheathing	B—Expanded Wood Lath
200	0.06 inches	0.06 inches
400	0.15	0.06
600	0.26	0.20
800	0.59	0.29
1000	1.07	0.37
1200	1.93	0.51
1400	3.65	0.67
1500	5.13	0.92

IDENTICAL panels with frames four feet high and eight feet long, constructed with sills and studs $1\frac{7}{8} \times 3\frac{3}{4}$ in. and studs placed 16 in. or centers, were prepared.

FRAME A had one side covered with $\frac{3}{4} \times 6$ in. dressed sheathing nailed at each stud with 8D nails, and the other side covered with common lath spaced 2 in. on centers and staggered in the usual way.

FRAME B was covered on both sides with Expanded Wood Lath sheets 8 ft. long and 16 in. wide, fastened at the juncture of each rib and stud with 5D nails.

In testing these panels the bottom sill was clamped to the base of testing machine and the pull applied to the top sill in the direction of its length.

Expanded Wood Lath, by this test, has been proven much stiffer than the old standard construction. But added to this advantage are its high insulating qualities and the much lower construction cost when used for either exterior stucco or interior plaster.

Automatically Backplasters

between the lath and asphalt felt. Not an ounce of material wasted. You get the intrinsic value and strength of every ounce used.

Complete Report of This Test and Descriptive Literature Will be Sent on Request

USE THIS COUPON

Please mark X opposite your profession.

- Architect
- Contractor
- Builder
- Material Dealer
- Plasterer
- I am interested in your special dealers proposition.

Expanded Wood Lath Corporation,

Conway Building, Chicago, Ill.

Date.....

Gentlemen:

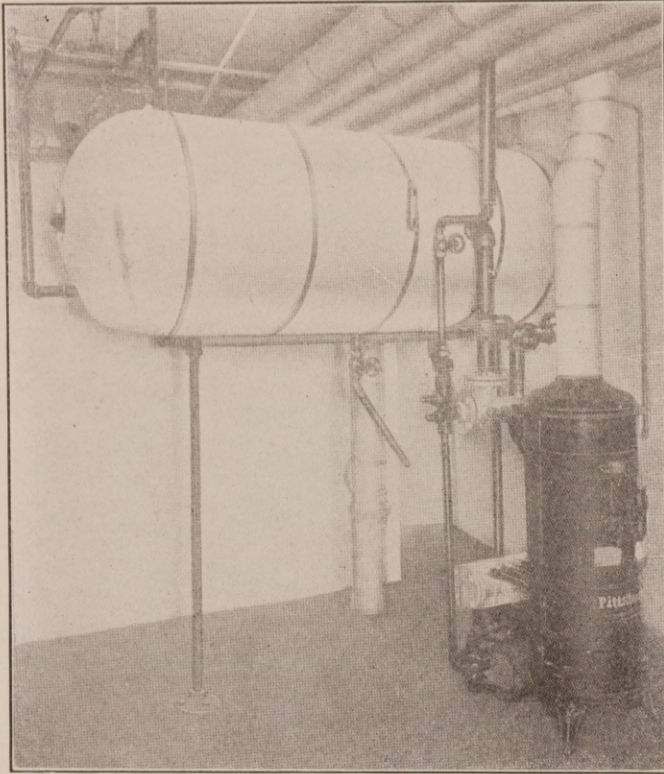
Please send me free samples and descriptive literature on Ex-Wo-Lath.

Name of Firm.....

Individual

Address

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



The Dahlquist Copper Hot Water Boilers

For Private Residences, Large Apartment Houses, Hotels, Hospitals, Restaurants and Public Institutions

Long and Reliable Service Guaranteed

➔ A 300-gallon Dahlquist copper tank installed in the residence of J. R. McCune, president of the Union National Bank of Pittsburgh.

Before placing your order, write us for current prices.

DAHLQUIST MFG. CO. 40 West 3rd St., BOSTON, MASS.

➔ *Simply tack on—Turn the Corners!*

SEND FOR A SAMPLE

I want every Architect, Dealer and Contractor and Builder to send for a sample of my Insulated-Cushion Weatherstrip which saves 20 to 40% in fuel.

If you see and examine this strip you will want to employ it, and there's a good profit in it.

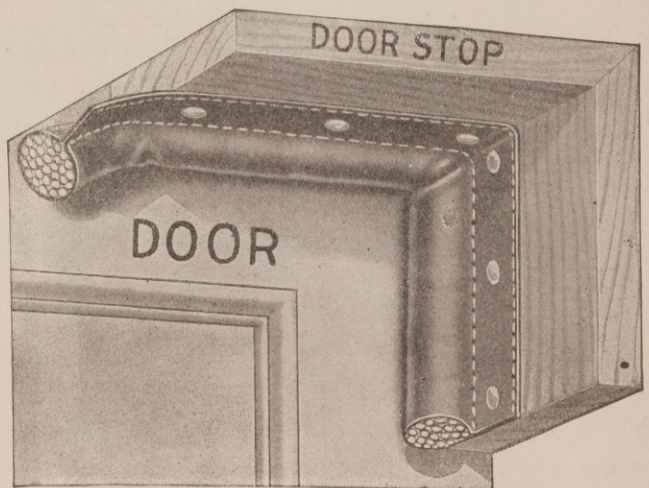
It is the easiest of all weatherstrips to apply. Your customers will like it because they need simply to tack it on and turn the corners as shown in the illustration.

Wirf's Home Comfort INSULATED WEATHERSTRIP

The only tool needed is a tack hammer. This waterproof, noiseless strip is also flexible. It never hardens, cracks or tears. Can be readily adjusted to fit varying surfaces, warped doors, 90 degree angles, etc., without cutting or waste.

People don't have to bother to take out a window, or take down a door, or cut or mitre a corner. It fits snugly and keeps out wind, rain, snow, dust and sand. No wood to rot, crack or break. No metal to rust.

And there's no waste in selling it—no left over pieces. It comes in continuous lengths. I am putting it up in convenient corrugated shipping cartons of 50 and 100 ft. lengths; in coils of 250 ft., and on reels of 500 and 1000 ft.



I guarantee every foot to give entire satisfaction. Write me and I will send you sample, trade prices, testimonials from dealers and customers and other literature that you will find interesting and profitable.

E. J. WIRFS

Sole Manufacturer and Patentee
125 SOUTH 17TH STREET

ST. LOUIS, MO.

DISTRIBUTORS:

Chas. J. Wachter Co.
103 No. 2nd, Phila., Pa.

11 Debrey St., Pittsburgh, Pa.

Hardware Sales Co.
1276 W. 3d St., Cleveland, O.

W. W. Bolz,

O. D. Peters,
42 Murray St., New York

Donald MacFadgen,
136 W. Lake St., Chicago.

The Mailo Box



The modern built-in mail box

An essential built-in feature for every modern home.

The Mailo Mail Box will insure beauty, convenience and protection in receiving your mail.

Mailo Box is made in various styles and for all wall thicknesses.

A distinct improvement in the chain of household necessities.

Mail is placed in box outside and is taken out inside. See illustrations.

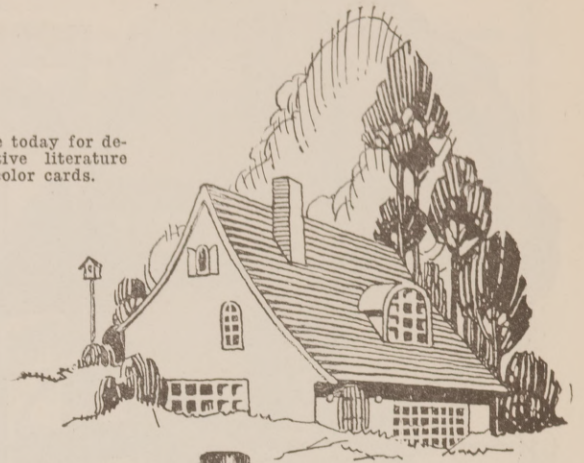
Priced from \$6.00 to \$15.00

Descriptive circular mailed upon request. Special service for architects and contractors on all mail problems.



PENN-GREG MFG. CO.

516 CAPITOL BANK BLDG. ST. PAUL, MINN.



Write today for descriptive literature and color cards.

COOLEGE & HYGRADE
Paints and Varnishes

Specified most often by noted Architects and used by Contractors and Master Painters where the work is of the highest character and where results must be certain.

F. J. COOLEGE & SONS

ATLANTA

SAVANNAH

CHARLOTTE

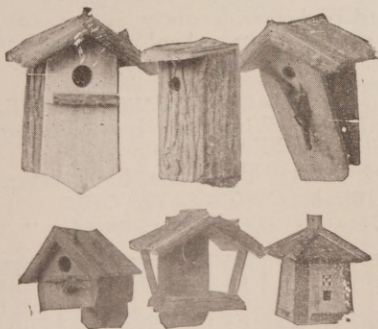
MIAMI

STRUCTURAL IRON WORKS

FOUNDRY AND MACHINE SHOPS

GRAINGER & CO., Inc.

Established 1833 Tenth St., Louisville, Ky.



"RUSTIC Bird Houses are most successful because they are more like the Natural places Birds nested in before it became necessary for man to provide nesting places."

Rustic Cedar Bird Houses, any three for \$5.00 and Parcel Post charges. Weight of

3 is 10 lbs. Amount for postage is easily calculated.
CRESCENT BIRD HOUSES

P. O. BOX 357

TOMS RIVER, N. J.

Shelby Drawer Pulls

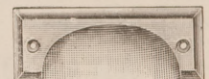
Drawer Pulls are one of the many lines of Builders Hardware manufactured by The "Shelby Spring Hinge Company."



Our pulls are stamped from wrought steel, brass or bronze metal and finished to match all Builders Hardware Finishes.



Write today for catalogue describing this and other lines of Builders Hardware.



The Shelby Spring Hinge Co.

Shelby, Ohio, U. S. A.



**Look for the
Cross and Circle
Printed in Red**

THIS symbol appears in every genuine package of Alabastine. It guarantees you beautiful, durable, sanitary walls, modern and delicately tinted in soft, pleasing colors which harmonize perfectly with your rugs and draperies.

Alabastine

TO DEALERS EVERYWHERE.

The word Alabastine, through the merits of the goods and the familiarizing of the consumers with our package and trademark, represents to this consuming public a standard of quality. There is only one Alabastine. There is only one standard of quality. If a package of Alabastine in your town is good, it is no better than a package of the same goods in Shanghai, China, Tokio, Japan, or San Francisco, California. If it is not good then the packages in the above named locations are equally inferior.

The general consensus of opinion is that Alabastine is a good material. It has demonstrated its superiority by the test of time and by the wonderful demand existing for it.

The merits of Alabastine are recognized. It is standardized by advertising, makes an attractive display for shelf or window, occupies small space, packed compactly, yields a very satisfactory margin of profit and gives universal satisfaction to the trade. Write for full particulars and names of our nearest distributors.

ALABASTINE COMPANY
GRAND RAPIDS, MICHIGAN.

Your local Dealer is Entitled to Your Trade



CLOISTER BRICK

ARCHITECTS find the soft mellow texture of *Cloister Brick* gives a richness and a dignified beauty to their buildings. The four shades of red and brown, used separately or mingled, produce a very artistic and coveted effect. Decide now to use *Cloister Brick* at the earliest opportunity and see how successfully it will work out.

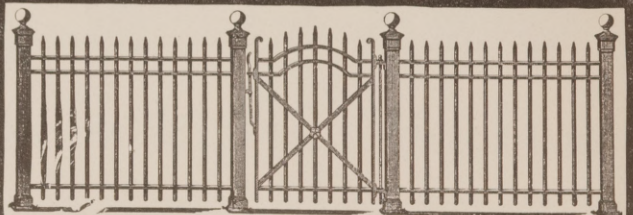
Write to Department 411 for a "Cloister Brick" book, showing many fine architectural examples in which Cloister Brick have been used.

WESTERN BRICK COMPANY

Danville, Illinois.

Capacity One Hundred Million Annually.

Stewart's
IRON FENCE
STANDARD
OF THE WORLD



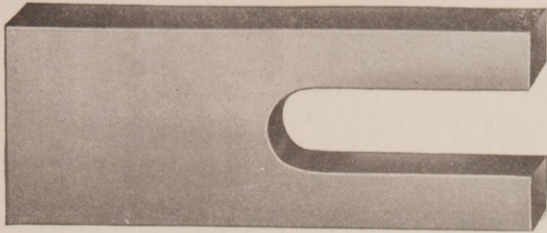
DESIGNS for every purpose—
town houses, suburban homes, country estates, cottages, cemeteries, cemetery lots, school grounds, factories and all other purposes where a neat and substantial fence is required. Send for catalogue.

We also manufacture CHAIN LINK WIRE FENCE, Balcony Railing, Grilles, Wire and Iron Window Guards, Wire Partitions and Folding Gates.

The Stewart Iron Works Co., Inc.
241 Stewart Block, CINCINNATI, OHIO
"The World's Greatest Iron Fence Builders"



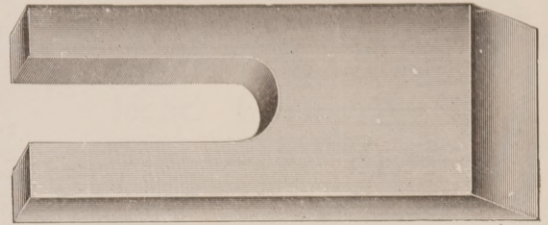
Rough Cut Sticker Blanks



A large stock carried—Prompt shipments made.
Address Desk No. 2

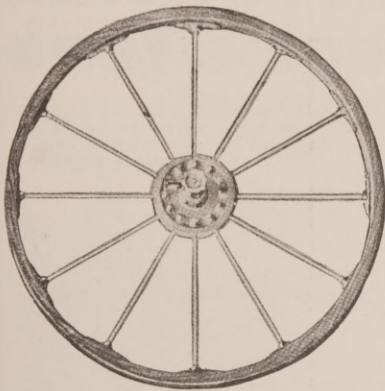
Beveled and Faced Sticker Blanks

Beveled, Faced and Tempered Sticker Blanks
All Kinds of Moulding Knives Made to Pattern.



Made of
High Grade
Carbon
Tool Steel

GUSTAFSON & SCOTT MFG. CO., (not inc.) 4315-25 Wabansia Avenue, Chicago, Ill.
Write for our latest Catalogue No. 20



IT IS IMPORTANT to keep your band saw wheels trued up. This will help to eliminate the breaking of band saw blades.

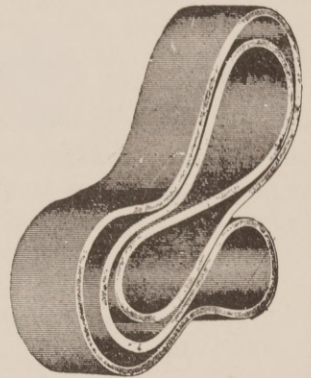
We Repair Band Saw Wheels

true them up, put on new rubber bands and new brass bushings when necessary so as to make them run perfectly true. When in need of repairs write us. When ordering bands state diameter and width of wheel.

High Grade Rubber Bands for Band Saw Wheels
Carried in Stock

Address Desk No. 2

GUSTAFSON & SCOTT MFG. CO.
(Not Incorporated)
4315-25 Wabansia Ave. Chicago, Illinois
Write for our latest Catalogue No. 20



B A B C O C K
SPRUCE LADDERS



Let Us Quote You on Spruce Ladders—We Pay the Freight

W. W. Babcock Co., Bath, N.Y.

PERFORATED METALS HEADQUARTERS
FOR COTTON OIL MILLS
Send for catalogue
and samples of our
Perforated Sheet
Metals for all uses.

ERDLER PERFORATING CO., Rochester, N. Y.

MORTAR COLORS.



The Strongest and Most
Economical in the Market.
One-half the amount of
our Mortar Colors will do
the work of any others,
and they are unsur-
passed in strength, fine-
ness and body.

Write for samples and
quotations. We manufacture
a superior grade of
Red Oxide of Iron Paint for
Railroad Cars, Bridges,
Barns, Fences, Etc.

Chattanooga Paint Co., Chattanooga, Tenn.

SPECIFY AND USE

ROYAL



CEMENT

Manufactured by the WET process
insuring absolute uniformity.

Tested in our Laboratory
once every sixty minutes.

Dixie Portland Cement Co.
CHATTANOOGA, TENN.

SEWAGE DISPOSAL WITHOUT SEWERS

Perfection Septic Tank



Available anywhere. Manufactured in
37 cities from Maine to California.
Endorsed by leading health experts
and Sanitary Engineers.



Write for
Free Health
Bulletin.

UNITED CEMENT PRODUCTS CO., Indianapolis, Ind.

A Practical, Efficient and Inexpensive Shingle Baler

Every dealer in wooden shingles is bothered with
loose and bad order shingles. There are usually some
bad orders in the best of shipments. Bundles are broken
while unloading. Bundles are broken in handling
about the yards. It pays every dealer to put these
loose and bad orders into good orders.

The Johnson Shingle Baler will do this for you in
short order. Every dealer needs one. Every buyer
satisfied. The time, labor and expense saved on the
bad orders in just one car usually pays for it. Send for
our illustrated folder which tells you all about it.

Johnson Manufacturing Co.

KELLEY

::

IOWA

Contractors' and Building Castings, Machin-
ery and Material, Steel Beams, Girders, House
Front Columns, Lintels and Plates, Engines,
Hoisting Rigs, Rope and Chain Blocks, Wire
Rope, Boilers for Heating Buildings, Window
Weights, etc., etc.

Lombard Foundry, Machine and Boiler Works and Supply Store

Capacity for 300 hands.

Augusta, Ga.

Drafting Room Materials

Riefler & Sphinx Round System Drawing
Instruments. Drawing Boards and Tables.
Detail and Tracing Papers. Everything for
the Drafting Room.

F. WEBER & CO., Main House and Factory, PHILADELPHIA
Branches: St. Louis, Mo.; Baltimore, Md.

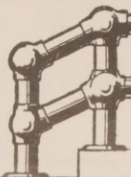
POTTRY TILE AND BRICK

Made from fragments of old jugs and shale
80 STOCK SHAPES IN THREE DIFFERENT TEXTURES.
Write for sample and cuts of artistic fireplaces.

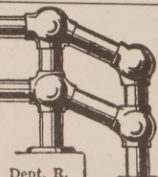
B. MIFFLIN HOOD BRICK COMPANY

ATLANTA, GA.

IRON PIPE RAILINGS



When in the market for Pipe Railing for Stairs, Bridges or Retaining Walls,
send us your drawings. We can quote you prices that will be worth considering.



Dept. R.

PIPE RAILING CONSTRUCTION CO., Long Island City, New York

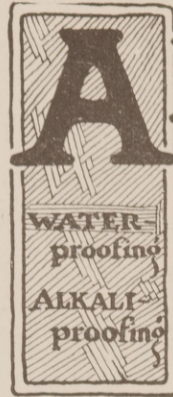
THE CUTLER MAIL CHUTE

manufactured and installed to sustain a reputation for good work and service enjoyed by us for nearly forty years.

*Specify Model F
Standard equipment
for Cutler quality
at least cost.*

CUTLER MAIL CHUTE CO.
OFFICES AND FACTORY
ROCHESTER, N. Y.

?? ? Do You Know That ? ? ?



IS
The absolute Waterproofer?
IT
Is adaptable to any kind of pervious materials such as Concrete, Plaster, Wood Pulp, Sawdust, Fibres, Asbestos and like materials?

IT
has withstood Alkali concentration of 13,000 to 20,000 parts per million in both laboratory and field tests for years?

THAT
ALKAGEL (a gelling colloid) PRODUCTS are the result of years of scientific research and merit the consideration of the most conservative and careful architects, engineers, contractors and product manufacturers?

Your troubles are our worries. Let us work with you. Write for pamphlet.

AMERICAN ALGIN PRODUCTS COMPANY
201 Central Ave. West DULUTH, MINN.

F. E. MARKEL, Chief Engineer
G. A. WHITAKER, Office Engineer

The Markel Company, Engineers

Reports, Appraisals, Consulting, Designing
and Supervising

TELEPHONE IVY 0839 RHODES BUILDING
ATLANTA, GEORGIA

Heating and Ventilating	Material Handling Machinery
Central Station Heating	Elevators
High Pressure Steam Plants	Water Supply
Drying and	Fire Protection
Evaporating Plants	Plumbing and
Refrigeration and	Sanitary Systems
Cold Storage	Special Piping
Special Process Plants	Sewage Disposal
Power and Lighting Plants	Chemical, Gas, and
Electrical Layouts	



The guaranteed sash cord (since 1869 the standard) not only outwears common cords, but outwears chains and ribbons. The name Silver Lake A is printed on every foot of the genuine. Guaranteed full lengths.

Silver Lake Co.
Newtonville, Mass.

TURNER REINFORCING

HIGH TENSILE RESISTANCE AND MECHANICAL BOND WITHOUT LOSS OF TOUGHNESS. BENDING TEST GUARANTEED EQUAL TO STANDARD TEST OF PLAIN ROUNDS OF ANY GRADE :: ::

"Turner for safety and Economy"

C. A. P. TURNER CO.

Minneapolis

30 Church St. New York First National Bank Bldg Danville, Va. 423 Monadnock Block Chicago, Ill.

Notice to Architects

For that cool, non fading Bluegray side walk or stucco, ask your dealer for

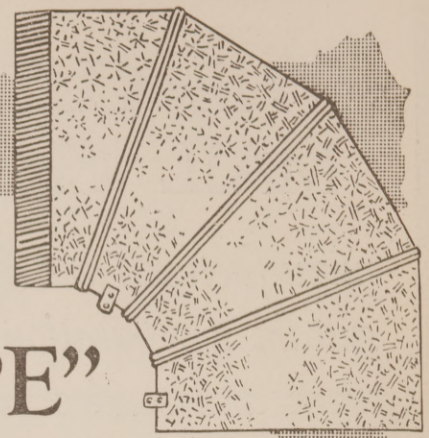
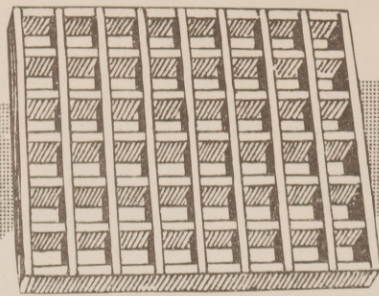
THE L. MARTIN COMPANY'S
EAGLE BRAND LAMPBLACK

Special Blacks for Pointing Brick and Stone.

The L. Martin Co.,

45 East 42nd St.

New York

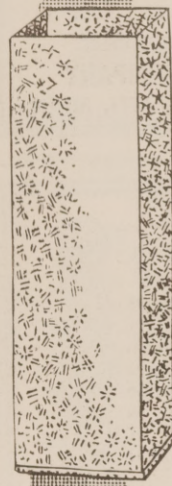
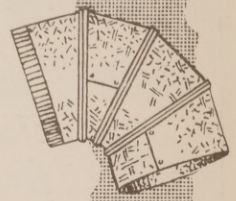


"HANDY PIPE"

HAS BEEN TESTED AND APPROVED
BY THE UNDERWRITERS'
LABORATORIES



This cover issued by Underwriters' Laboratories, Inc., principal offices and testing station 207 E. Ohio Street, Chicago, Ill., and was sent to all the leading insurance companies in the United States.

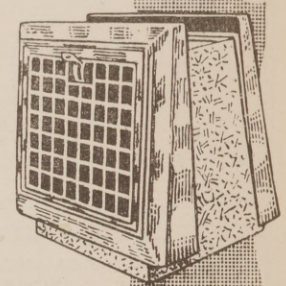


Hazards, Miscellaneous
FURNACE PIPE, Warm Air

145--May 20, 1911,

Tests and investigations conducted by the Underwriters' Laboratories, Inc., on single wall, single wall asbestos covered and double wall, warm air furnace pipe made by the manufacturers, show that the use of any of these types in connection with warm air furnaces involves an appreciable fire hazard and warrants the utmost care in their installation.

Double wall furnace pipe is the most efficient and least hazardous and its use is therefore recommended in preference to the single wall or single wall asbestos covered pipe.



It is the safest and most efficient pipe for conveying warm air from the furnace to the rooms.

You Want Your Customers to Have the Best

and when you specify, recommend or actually make use of F. Meyer & Bro. Co. HANDY PIPE you can be assured that it is the BEST!

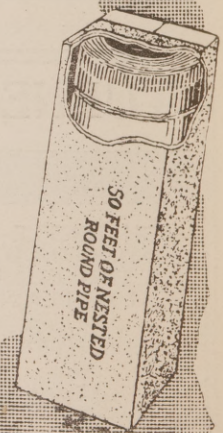
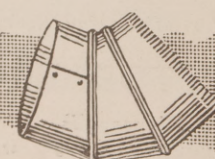
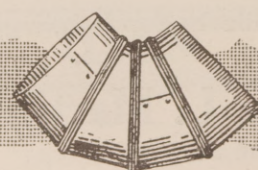
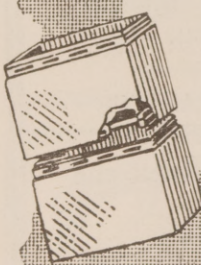
SEND FOR OUR CATALOGUE NO. 43

In addition to "Handy Pipe, it pictures and describes "Everything Needed in the Installation of Warm Air Furnaces."

F. MEYER & BRO. CO.

PEORIA

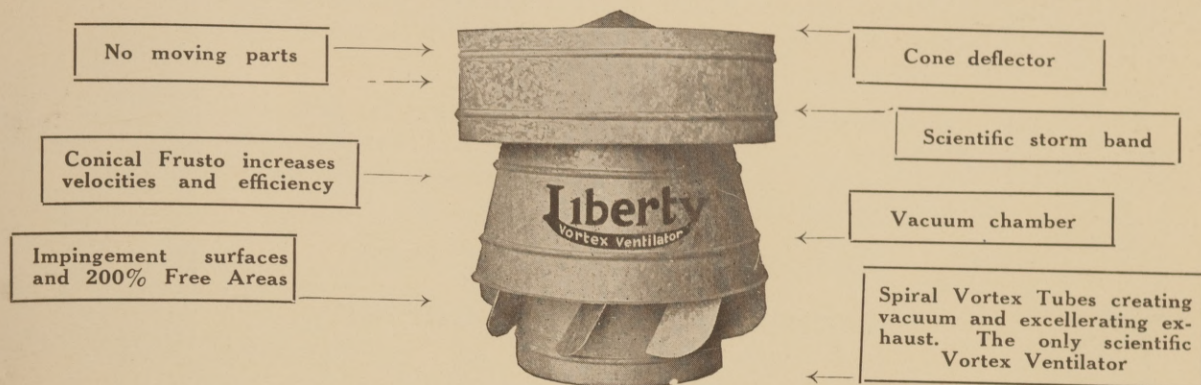
ILLINOIS



Where Constant Positive Ventilation is Required use the Liberty Vortex Vacuum Ventilator

A Super Ventilator which by Vortex Created Vacuum has proven nature's most powerful ventilating ally, and 100 to 300% superior to any other ventilator in Actual Competitive Tests.

The Vortex creates the Vacuum, the Vacuum creates the terrific pull of the Liberty Vortex Vacuum Ventilator



Our Engineering Department and Engineers will solve your ventilating problem and will give expert technical and practical advice without obligation.

“Always the best in
Competitive Tests”

“Watch the Wind
and see the Vortex”



A Breath of Fresh Air

WHERE IT IS NEEDED

IN THE NURSERY AND PLAY ROOM
IN THE KITCHEN, OFFICE AND SCHOOL
IN THE BATH ROOM AND SICK ROOM
DORMITORIES, HOSPITALS, FACTORIES AND WORK SHOPS

The Call Unit Ventilator

Is a complete Ventilating system supplying a continuous, yet gentle, stream of fresh air without drafts.

The initial cost is very reasonable and the operation cost is practically nothing.

They are beautiful in appearance, fire and warp proof, everlasting, staunch and rigid.

JOHN CALL COMPANY
VENTILATING SPECIALISTS

PHILADELPHIA :: :: PENNSYLVANIA
SOUTHEASTERN REPRESENTATIVE

LUKE SEAWELL

AUSTELL BLDG.

ATLANTA, GA.

Made for Any Window
Is Adjustable
Works with Electricity

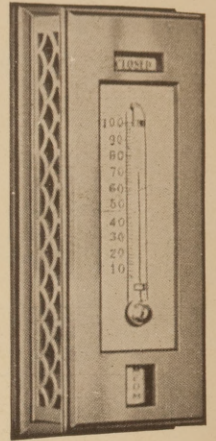
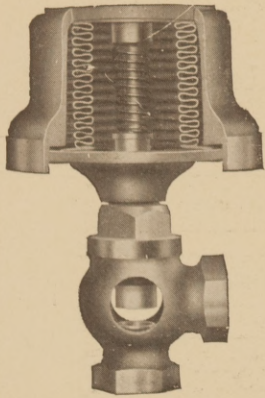
- JOHNSON -  - SYSTEM -

The Johnson "ALL METAL" Thermostat

is an important part of the Johnson System of Temperature Regulation for buildings of all types.

By this system the temperature of the important rooms is automatically regulated and the humidity controlled. It assures a comfortable, uniform temperature for every room containing a Johnson Thermostat.

This "ALL METAL" Thermostat is simple, neat, and compact. Harmonizes with any room and is as efficient as it is artistic. Besides, it contains no rubber diaphragms to wear out and cause trouble.



CATALOGS WILL BE MAILED ON REQUEST



Johnson Service Company
MILWAUKEE WISCONSIN
OFFICES IN ALL LARGE CITIES

TEMPERATURE  REGULATION



BOWL STRAINER

CAP STRAINER

THE SUPERIOR

(CAST ALUMINUM)

Roof Leader Connection

All brass ferrules, bolts and screws are eliminated.

Being made of aluminum, it is absolutely rust-proof, and its tensile strength is greater than that of cast iron.

A flexible lead connection of convoluted folds between the bowl and conduit admits of expansion and contraction. It relieves the roof drain from any strain caused by settling of the leader line. This flexible lead joint is protected by an inner discharge tube, forming an air chamber to collect warm air and gases lodging in the leader line, and thus minimize condensation and freezing. Can be used in any style of roof deck.

The Superior Cast Aluminum Roof Leader Connection is being specified and has the endorsement of leading architects, roofers and plumbers, throughout the country. It pays big profits and enables the contractor to gain a reputation for first-class work, which is the most valuable asset he can have. Shipped complete, flanged with either one of 3 type strainers ready for immediate installation.

Don't Delay. Write today for full description and agency terms.

The Superior Skylight Company, Inc.

95 Webster Ave.,
LONG ISLAND CITY, N. Y.



The International Mark of Ripolin

This design is the international identification mark of *genuine Ripolin Enamel*. All Europe knows this famous Ripolin trademark. The secret process of making Ripolin was discovered in Holland over thirty years ago. Since that time Ripolin has been used throughout the civilized world.

The rapidity with which Ripolin has risen in popular favor is very largely due to the unanimous approval of architects.

Ripolin can be obtained in Gloss White, Semi-Gloss and Flat White. It can also be supplied in seven delicate tints. Beautiful interior decorative effects can be secured by combinations such as Ivory for the body and one of the Grays for the trim. Many of the finest interior decorations have been made possible by the use of Ripolin Enamels.

Write today for one of our new Ripolin tint folders.



Every Package Sealed

THE GLIDDEN COMPANY
And Its Affiliated Companies
National Headquarters Cleveland, Ohio

GLIDDEN

PAINTS — VARNISHES — STAINS — ENAMELS

See our page in Sweet's Catalog

Drafting Room Furniture

of the Better Kind



That's the only kind we make and we have been doing it for forty years. We manufacture our own steel furniture and our steel plant is as complete as our woodworking plant.

Our line of drawing tables is very complete and made in sizes from 22"x30" up to 48"x120".

The Champion Table shown to the right is a popular model and always gives satisfaction.



Steel for permanence, and Wood for beauty. We make both steel and wood Sectional Blue Print Cabinets. They are space savers, and really protect your drawings and blue prints.

Send for our catalog of Drafting Room Furniture and make it your guide in purchasing permanent furniture of quality.

The Hamilton Mfg. Co.

Two Rivers, Wis.

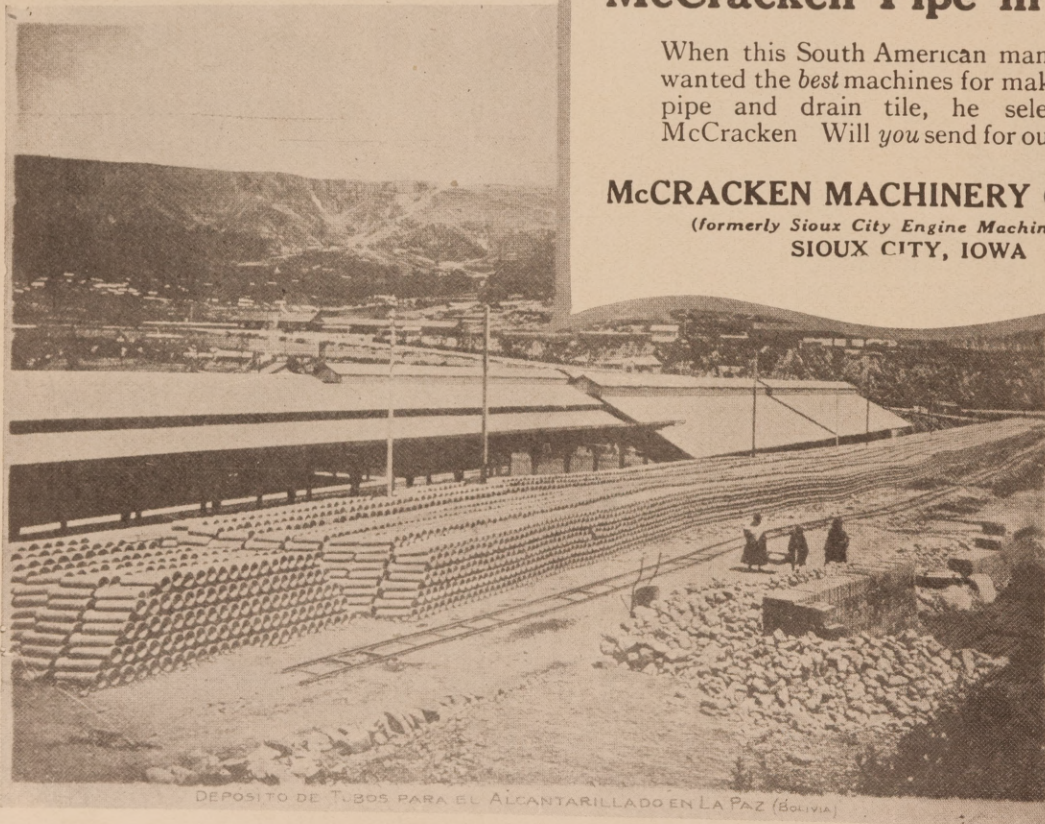
McCracken Pipe in Bolivia

When this South American manufacturer wanted the *best* machines for making sewer pipe and drain tile, he selected the McCracken. Will you send for our catalog.

McCRACKEN MACHINERY COMPANY

(formerly Sioux City Engine Machinery Co.)

SIoux CITY, IOWA



DEPOSITO DE TUBOS PARA EL ALCANTARILLADO EN LA PAZ (BOLIVIA)

Colonial Hardware in Hand Wrought Iron



Not only serves well its purpose, but gives the touch of distinction to a Colonial house, garden gate, bungalow or camp. Brochure of designs showing latches, hinges, knockers, mud scrapers and such on request with four cents postage.

TELLER'S COLONIAL HARDWARE, 280 Wall St., Kingston, N. Y.

BLUE RIDGE MORTAR COLORS

REDS
BUFFS
BLACKS
CHOCOLATES

"We would, but we can't make them better,
We could, but we won't make them cheaper."

BLUE RIDGE MORTAR AND CEMENT COLORS ARE PRODUCED FROM Non-Fading Ores carefully tested for uniformity. With thirty years' experience in preparation of pigments, our products are always made uniform and of full strength. We invite comparison with any other.

Your request will bring prices
and color cards or samples.

BLUE RIDGE TALC CO., Inc.

HENRY, VIRGINIA

Mills: Henry, Bedford and Basic, Virginia

Zemco-lite

TRADE MARK

"The Cement Paint"

A paint prepared from portland cement—it hardens with a positive, permanent bond to brick, concrete, stucco and all types of masonry or plastered surfaces.

Zemco-lite comes in powder form, to be mixed with water (saving the cost of oil). It is obtainable in white and eight popular colors.

Write for color card, prices
and full directions for mixing
and applying *Zemco-lite*.

American Cement Paint Co.

CHATTANOOGA, TENN.

ALLEN DEAS, ATLANTA, AGENT

HAAS-HOWELL BLDG.

ATLANTA, GA.

French Imported CAEN STONE Cement

For interior stone finish in Banks, Churches, Hotels,
Theatres, Schools, Residences, etc.

For detailed information see Page 408—Sweets Catalogue, or write

Palmer Lime and Cement Company

(EXCLUSIVE AGENTS)

103 Park Avenue

NEW YORK, N. Y.



ES ELEVATOR DOOR EQUIPMENT

ES PNEUMATIC DOOR OPERATORS

Open and close elevator doors quicker and quieter than by hand.

ES ELEVATOR DOOR CLOSERS

Close the doors by spring pressure. Prevent slamming and ensure doors being locked.

ES ROLLER BEARING HANGERS

Are more durable, quiet and nearly frictionless than ball bearing hangers.

ES POSITIVE ELECTRIC INTERLOCKS

Prevent the starting of the elevator until all the doors are closed and locked.

See Sweet's Architectural Catalog and exhibit at Architects' Samples Corporation (N. Y. C.)

ELEVATOR SUPPLIES COMPANY, INC.

Main Office and Works:—HOBOKEN, NEW JERSEY

Branch Offices:

CLEVELAND

1039 Walnut Avenue

CHICAGO

111 S. Jefferson Street

ST. LOUIS
Railway Exchange Bldg.

PHILADELPHIA

1714 Ludlow Street

SAN FRANCISCO

186 Fifth Street

EVERLASTONE

INDESTRUCTIBLE STUCCO

It's Just a Good Stucco

"Everlastone is good! When properly applied it will last a lifetime. It won't crack, discolor or sluff off.

Dealers like "Everlastone"—it carries a good profit and builds repeat orders.

WE ALSO MANUFACTURE—

*Everlastone Life Time Plaster,
Corkstone Flooring
Stucco Dash—in wide varieties*

Distributors Wanted

Write us for particulars

**EVERLASTONE
PRODUCTS CORPORATION**

119-21-23 N. Collington Ave.

Baltimore, Md.

F · O · R · D

Oil Burners

**FOR HOUSE HEATING—COOK
STOVES OR HEATING STOVES**

Gravity feed which does not cancel insurance as other types do.

Complete with tank, tubing, valves and connections, ready to install.

It burns about 95% air and about 5% oil. No complicated mechanism to get out of order.

With correct adjustment of valve you obtain perfect combustion burning all of the oil and matter carried in suspension eliminating the forming of carbon.

Write

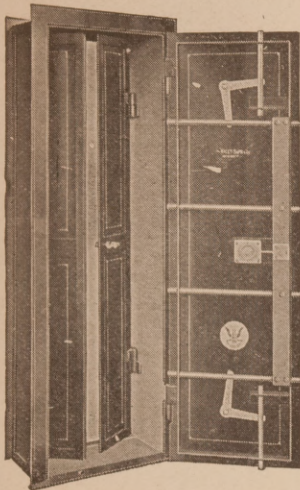
PERRY M. FORD & SON

Manufacturers

184 SOUTH HIGH STREET

COLUMBUS, OHIO

The Hall's Safe Company



P. O. BOX 846.



CINCINNATI, OHIO

MANUFACTURERS OF

Vault Fronts Vault Linings Grilles and Gates
 Omnibuses Chests Deposit Boxes
 Filing Devices Wall Safes Tabernacles
 Fire Proof Safes—Burglar Proof Safes—Manganese
 Safes with Hall's Key-Combination or Time Locks.

Finest Workmanship—Best Material and Finish

No. 1AA Fireproof Vault
 Door.

Wall Opening

79 High

32 Wide

20 Deep



CO-OPERATIVE SERVICE.

This company maintains a department for co-operating with architects or clients in solving problems encountered in selecting and installing vaults.

Prices and estimates will be promptly furnished on application.

CRAFTEX

ONE COAT DECORATES WALL-BOARD

Conceals all Joints

Craftex has sufficient body to completely conceal defects in plastering. Applied with a brush over wall boards it produces an artistic surface with one coat and conceals joints without paneling.

We shall be glad to consider applications from prospective representatives in Southern territory.

Distributing Agents: Sole distribution privileges in your territory mean repeat orders.

Write for
 literature

SIMMONS, GARDNER CO.



146 Summer St.

Boston, Mass.

**Where Convenience
Overshadows Cost**



Drop all
waste here—
then forget
it!



THE KERNERATOR, installed when the building is being erected, solves the problem of garbage and waste disposal for all time—with no upkeep cost. The waste itself is the only fuel required. All household refuse—even tin cans, crockery and glass—is dropped through the convenient hopper door and falls to combustion chamber, which is built at base of chimney in basement. Lighted occasionally, everything but non-combustibles is burned; the latter are flame-sterilized and removed with the ashes.

KERNER INCINERATOR CO.
1061 Chestnut St.
Milwaukee, Wis.

For Details See
Sweet's (1923) Page
2340-41, or write to
factory.

KERNERATOR
Built-in-the-Chimney

Reg. U. S. Patent Office



Builders Club, Chicago, Ill.

The Bradley Washfountain

Used in Clubs, Schools, Hotels, Colleges,
Industrial Plants, etc.

THE MODERN WASHROOM
EQUIPMENT.

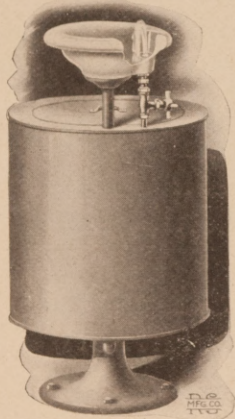
WRITE FOR CATALOG.

Bradley Washfountain Co.

413-419 3rd.

Milwaukee

**Provide Workers With
Pure Cool Drinks**



Prevent the slump in production by installing Rundle-Spence "Vertico-Slant" stream drinking fountains, which can supply your workers with plenty of cool, refreshing drinks which will restore energy for production.

Rundle-Spence metal body coolers are inexpensive and their upkeep is more than repaid by increased production where installed.

The slant stream insures sanitation. The bowl is so designed that the drinker cannot touch the nozzle and the nozzle stream affords additional protection since it prevents water touched by the drinker's lips to fall back on the jet.

Catalog sent on request.

RUNDLE-SPENCE MFG. CO.

MILWAUKEE, WIS.

**Louis F. Eisele
& Son**

MANUFACTURERS OF

Patented

Shower Stall Doors

Metal Medicine Cabinets

Rolling Fire Place Screens

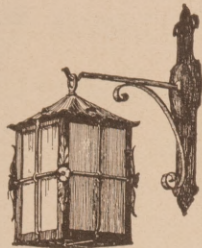
Rolling Fire Place Blowers

22nd Street & Glenwood Ave.

Philadelphia, Pa.



No. 106



No. 130

Metal Work

Metal work of discriminating taste accentuates the distinctive character of any building and distinguishes it from the commonplace.

Original designs and fine reproductions of Italian, Spanish and Colonial metal work. Door Grilles, Radiator Grilles, Stair Rails, Gates, Decorative Hardware, Lanterns, Balconies, Weather vanes, Fire Screens, Fixtures, Wall Brackets, Etc.

Estimates furnished and plans carefully executed. We shall be glad to furnish sketches to those seeking suggestions.



JAMES R. MARSH

Architectural Ornaments

101 Park Ave. (at 40th St.) New York, N. Y.

Pickwick Arms Hotel,
Greenwich, Conn.

Tudor Stone
ROOFS

Frederick French Co.,
Designers.

One of the most skillfully and beautifully handled roof contours is that of the new hotel at Greenwich, Connecticut—the Pickwick Arms. Here we have an excellent example of the flexibility of Tudor Stone and the ease with which it can be used for broken roof lines and the construction of dormer windows, and still maintain a picturesque roof, which harmonizes perfectly with the general design of the building.

Write for Booklet.

Rising and Nelson Slate Company

West Pawlet, Vermont
Architects Service Department, 101 Park Avenue, New York
CHICAGO PHILADELPHIA BOSTON



No. 28610
Height without links
26 inches.

For the Colonial Hallway

REFINED DIGNITY characterizes the restrained lines of this olden time Lantern, and gives it a wide range of use. It may appropriately be placed in the Georgian or Colonial Hallway, near the final curve of a graceful winding stair, with its delicate white spindles and polished mahogany rail; or it may be placed in homes whose furnishings are of no distinct period.

Finished in Colonial or stained brass, with clear glass cylinder.

We shall be pleased to submit sketches and advice to those genuinely interested in correct lighting fixtures.

Write for our small portfolio showing a few authentic pieces. Prices on request.

Robert Phillips Co., Inc.

Artisans in All Metals

101 Park Ave. (at 40th Street) New York City

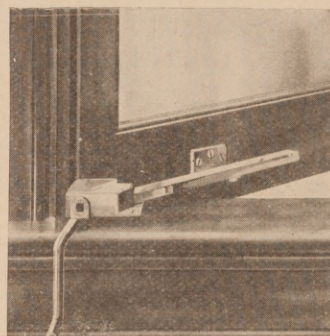


Fig. 1

swinging Casement Windows from within. Screens and curtains may be hung inside without interfering with operation. Locks sash in any position. Has power to overcome binding and rattling.

An additional asset to the popular outswinging casement. Simple, strong, practical and absolutely guaranteed. Placed on top or within framework as per illustrations 1 and 2.

Complete catalogue containing 58 pages sent free to readers of "The Southern Architect and Building News."

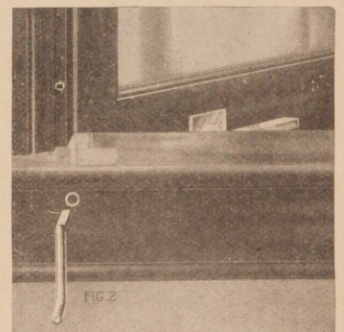


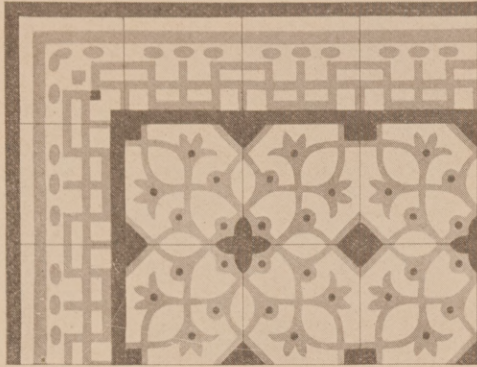
Fig. 2

THE OSCAR C. RIXSON CO.

Manufacturers of
IMPROVED MECHANISMS IN BUILDERS' HARDWARE
4442 Carroll Avenue Chicago, Ill. 1210 Architects Building New York, N. Y.

"CEMTILE"

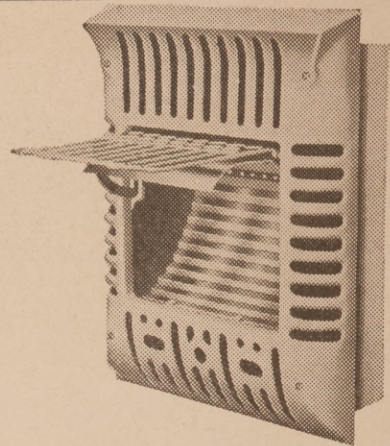
is the trade name of the most durable, economical, sanitary and beautiful mosaic floor tile.



Adapable for
**CHURCHES, BANKS, HOSPITALS, OFFICES,
 THEATRES, STORES, RESIDENCES,
 RESTAURANTS, ETC.**

The "CEMTILE" is manufactured from high grade Portland Cement and metallic minerals, thoroughly dried and seasoned, rendering it very compact. Architects and Contractors find that figuring the "CEMTILE" in their specifications enables them to render lower bids; at the same time it assures satisfaction and a saving to their clients. Illustrated catalogue, prices and information are cheerfully sent upon request. Write to

ROLDAN & CAMMARATA TILE CO.
 SAINT LOUIS, MISSOURI
 Main Office: 616-18 Biddle Street
 (Dept. A)



"YOUR SALES WILL BE BIG."

The QUAD GAS WALL HEATER

Approved by Underwriters' Laboratories. The Quad Wall Heater has passed the most severe tests imposed upon it by the Underwriters Laboratories. The flame chamber is insulated from the wall by three layers of metal, each one lined with heavy asbestos board, and three successive air chambers. This matter of insulation is very important in selecting a heater of the wall type.

For use in Bath Rooms, Bed Rooms, Sun Parlors, Living Rooms, Reception Rooms, Etc.

Safe and Economical for Manufactured or Natural Gas.

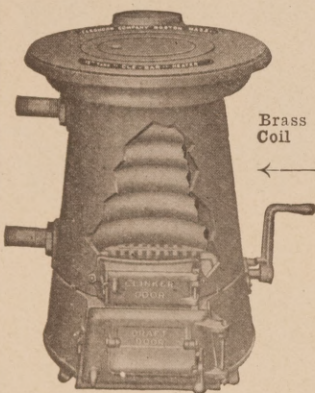
Send for convincing information

Manufactured by

THE QUAD STOVE MFG. CO.
 COLUMBUS, OHIO

CLE-BAR

SERVICE WATER HEATERS



The best and most economical service Hot Water Heater in the world.

LADIES

Do you want a skin like velvet? Then install a Cle-Bar Heater in your home. The Cle-Bar is made with solid brass coils which insures water hot, soft, clean, rustless and free from all impurities.

Good for any water pressure.

Good for a lifetime.

NO SECTIONS TO CRACK
 Your laundress will never do her work properly until you install a Cle-Bar. One coaling sufficient for fifteen to twenty hours.

FOR

Residences, Office Buildings, Apartments, Churches, Clubs, Golf Clubs, Restaurants, Shops, Laundries, etc.

SIZES

12", 15", 18", 21", 24".

Take out your old heater, your local plumber can place and connect a Cle-Bar in a few hours.

Send for Circular

CLEGHORN COMPANY

54 Battery March Street - - BOSTON, MASS.



Parquetry Flooring

Modern house plans always call for Hardwood Floors. Parquetry bears the same relation to ordinary hardwood as the oriental would to a tapestry rug.

In many localities our Flooring is handled by exclusive floor laying firms. Let us put you in touch with them. Elsewhere, we will be glad to send you catalogue and book of installations, and later to make estimates on designs and material desired.

Let us hear from you.

WOOD MOSAIC COMPANY

TROY STREET, NEW ALBANY, INDIANA

LIGHTING FIXTURES WIRED READY TO HANG



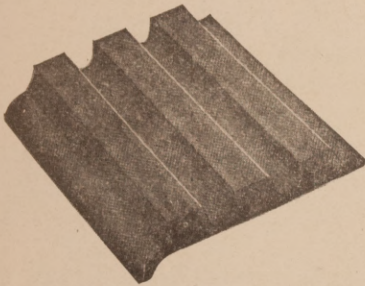
Send for Catalog No. 24.
Dealers ask for our dealers'
proposition.

ERIE FIXTURE SUPPLY CO.

DESK S

ERIE, PA.

UNIVERSAL



CONSTRUCTION—the LEAD inserts are firmly interlocked in the skeleton Steel or Brass Base, and form a PERMANENT non-slip surface at all stages of wear—no steel ribs to become smooth and slippery.

Universal Safety Tread Company
40 Court Street Boston, Mass.



ROYAL Double Cone VENTILATORS

Replace foul air with fresh invigorating air. They ventilate from the ground up. Install ROYALS on every building you erect, they please Clients. ROYALS can be used on the residence or public building as well as barns, theatres, factories. Built strong and rigid. Weather-proof. Made in all sizes. Always ventilating—rain or shine.

Our Catalog gives full information, write for it.

ROYAL VENTILATOR CO.

415 LOCUST ST.

PHILADELPHIA, PA.

AS SPECIFIED, BUT
BETTER WORKMANSHIP
AND SUPER-SERVICE



Marshall Manufacturing Co.
ROME, GA.

ARCHITECTS are specifying the IDEAL ELECTRIC DUMBWAITERS

For Hospitals

\$343.30 COMPLETE,
F. O. B. FACTORY, FOR:

Travel	Cap.	Speed	Shipping Wgt.
1 story	100 lb.	75' Min.	Approx. 650 lb.
1 story	75 lb.	100' Min.	Approx. 650 lb.

A slight increase for higher travels.

Runs on Ball Bearings.

This is the Electrical
Age—the dawn of the
IDEAL.

*Let
the
Ideal
Lift
It*

Hospitals are replacing
the hand power
outfits with the IDEAL
ELECTRIC.

The IDEAL is

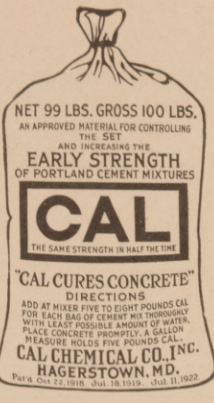
Indispensable
Dependable
Easy to operate
Automatic
Less work—
Just press button



PAGE 1985

Write for catalogue.

Ideal Electric Dumbwaiter Co., Inc.
Head office and factory, BUFFALO, NEW YORK



When the Engineers
Needed Quick Strength
on the

GREAT WILSON DAM

They wired for CAL.

CAL CHEMICAL Co.
HAGERSTOWN, MD.



RECO SEPTIC TANK

Acknowledged best Septic Tank manufactured. Why?

Made of Copper-Steel Plate which is absolutely watertight, insuring best bacterial (liquifying) results.

Heavily coated with Acid and Rust Resisting Enamel.

LOW FIRST COST
INSTALLATION COST
FREIGHT RATES

Patent Applied For

UNBREAKABLE :: :: :: WATERTIGHT
A TEN YEAR GUARANTEE

Write for Specifications and Literature.

Richmond Engineering Co.

1111 Brook Ave., Richmond, Va.



BLUE PRINTS

2"-48" wide—30" a minute. Simple, economical, automatic. 30-day free trial to approved credit risks.

WICKES BROTHERS

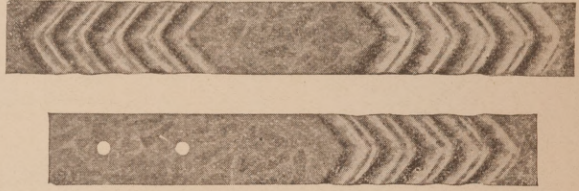
Established 1856

Saginaw, Michigan

New York Office—501 Fifth Ave.
Seattle Office—736 White-Henry Building

HERRINGBONE WALL TIES

(Patented)



Angular corrugations with
FLAT NON-STRETCH CENTER

Herringbone Wall Ties are to the wall, what mortar is to the brick.

WE ALSO MANUFACTURE—

STEEL WALL PLUGS

AND

BUILDING CORNERS

MERWIN MANUFACTURING CO.
ERIE, PA.

DONNELLY & COMPANY

531-535 N. Fourth St. Philadelphia, Pa.
Prompt satisfactory service
Send us your inquiries on

Plates, Sheets, Bars, Angles, Channels
Iron and Steel Tires Special Wire
Rubber Pads Special Channels
Bolts Nuts Washers
Metal Lath, etc.

Supplies for Builders, Contractors, Blacksmiths and Horseshoers

SYKES METAL LATH A SPECIALTY.

IRON and STEEL

COMPLETE WAREHOUSE STOCKS

MARCY STOVE REPAIR CO.

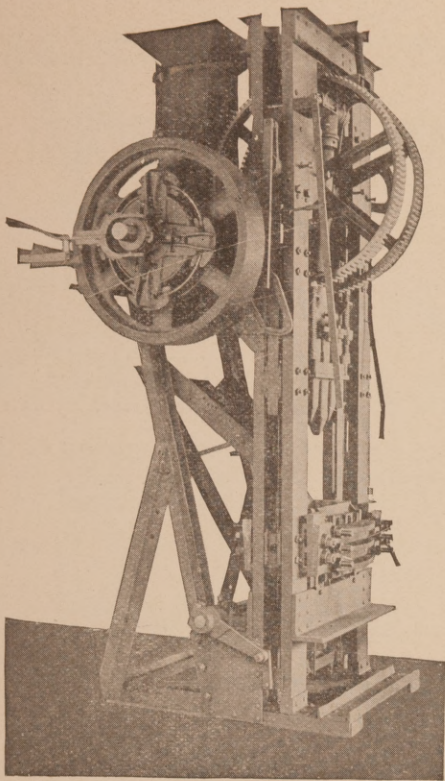
74 Beekman St., New York City.
manufacturers of

CAST IRON PLUMBING SUPPLIES

BOILER STANDS, Lockwood pattern.
BELL TRAPS, light, heavy and extra heavy.
CESSPOOL PLATES, square, round, hinged.

WASH TRAY LEGS.
GASOLINE FILL BOXES.
HALF ROUND SINK LEGS for enameled sinks.
SINK BRACKETS.

FOUNDRY BRANCH STORE
Perth Amboy, N. J. 340 Grove St., Jersey City, N. J.



Post Economy Punch

“Puts P-E-P into your block business”

The average operator will turn out 200 to 250 *packed* blocks per hour—blocks that are dense, strong, hard-surfaced. The *packing* process is powerful—the machine is built of over-sized parts, and it *stands* up.

Write for catalog on this and other machines comprising “The Red Line” of concrete products plant equipment.

Kent Machine Co., - Kent, Ohio

Chicago Office: 429 Monadnock Block

BANISH THE CESSPOOL!

An Individual Sewage

For dwellings that have no sewage facilities or that have a disease-spreading cesspool, the Sanitary Septic Tank providing for disposal of sewage is ideal.

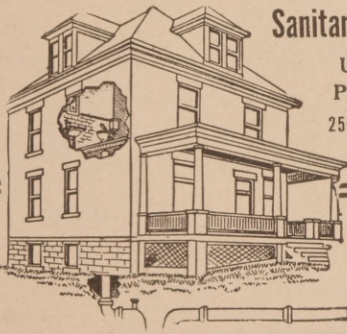
Sanitary Septic Tanks

are without competition and offer a combination of easy sales and big profits. Sanitation is a universal appeal and does sell Septic Tanks to builders.

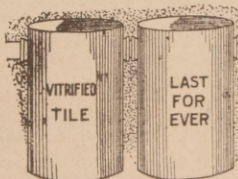
Sanitary Engineering Co.

Union Trust Bldg.
PITTSBURGH, PA.
250 W. 57th St., at Broadway
New York City

Fully Protected by Patents



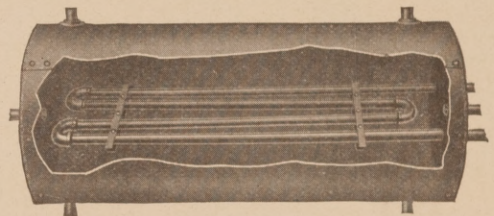
**WRITE FOR DEALER
PLAN TODAY**



YOU WILL REMEMBER

»**ARROW**»

Tanks By Their Service



**Riveted and Welded
Black or Galvanized**

Unconditionally Guaranteed

**AIR RECEIVERS
TANKS for all Purposes**

Write for prices

The Novelty Steam Boiler Works Co.

Factory: 917-929 S. Howard St. Baltimore, Md.
New York City Sales Office, 130 W. 42nd St., Room 1104

Stop Tool Losses

Brand your name or trade mark on scaffold planking, shovels, scoops, hammers, sawhorses and other building equipment. It costs but a few cents and will save hundreds of dollars worth of expensive tools. It is easily and quickly done with the

"EVERHOT" BRANDING IRON

Convenient, Economical, Efficient

The EVERHOT is also a soldering iron and blow torch giving an intense effective heat at a surprisingly low cost.

Because of its safety, light weight, ease and simplicity of operation any of your workmen can operate it. It is surprising how many valuable uses you can find for the EVERHOT in factory, shop and on building operations. Write for full descriptive circular and prices

EVERHOT MANUFACTURING CO.

DEPT. S MAYWOOD, ILLINOIS



ARCHITECTS AND BUILDERS

In selecting materials for the construction of permanent homes and various other structures are interested in

QUALITY AND BEAUTY

Face brick are now universally used in securing these results.

SUMMITVILLE "REDS" MATT TEXTURE, fulfill all the requirements of those desiring the best materials used.

They are distinctive and attractive in their beautiful deep rich tone of RED.

They are superior in quality, owing to their hardness and the impervious nature of the material from which they are made.

There are no red brick quite so red and so rich in tone as

SUMMITVILLE "REDS"

We will be pleased to tell you more about them or send you samples.

Summitville Face Brick Company
Summitville, Ohio



The PROJECTION Patent Applied Ladder SUPPORT For Saver

CAN be used on any kind of roof. Made of heavy steel and slips over ladder, holding ladder any distance required from gutter without nailing to roof. This support is made with a hinge frame, and will fit any pitch roof. Hinge frame can be nailed to roof if desired. This support binds ladder so it is impossible to slip on roof or ground. When in use workmen are in a handy position to work.

Our standard size measures 18 inches—we can furnish wider if desired—mention size.

Price Each, \$4.75 F. O. B. Indianapolis

GAUSS MFG. COMPANY

1443 South Meridian Street Indianapolis, Ind.

Pearson Automatic Nailers The Roofing Nailer "R. N. No. 7"



is adjustable for almost all kinds of roofing nails from 3/4 inch to 1 1/2 inches in length. This machine can be held by the hand in three different places, to make it handy for either a pitch or flat roof. It can

be worked as fast as the operator cares to use the hammer and with gloves or mittens on. Price \$14.50 postpaid.

The Shingle Nailers

are for 3d 1 1/4 inch wire nails p'ain orgalvanized. The speediest little Hand Nailer ever invented and put on the market. Price \$7.50 postpaid. Many users of these machines write us that they cannot get along without them, and that after many years usage the machine is still working good. Some of our customers give us more definite figures. One writes: "I have nailed over 300,000 shingles with my first machine, and the Nailer still runs good." etc., which proves that the Pearson Nailers are on the job.



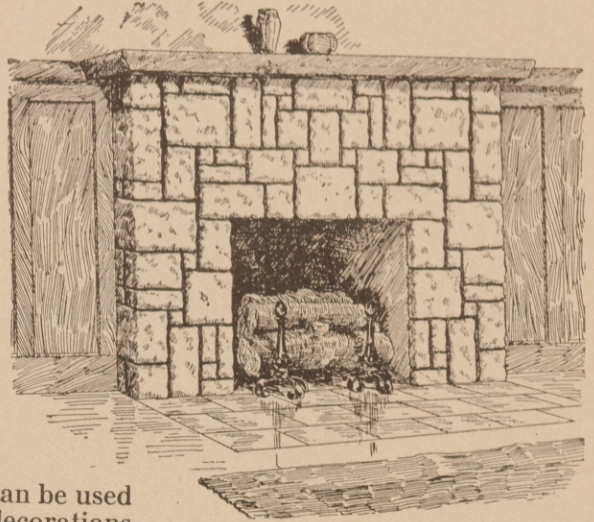
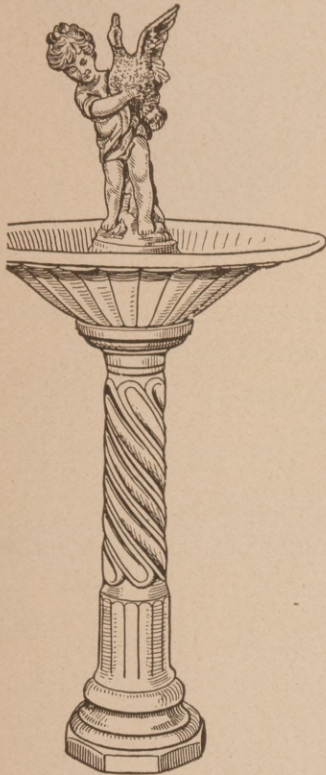
Order today. Delays never pay.

PEARSON MFG. CO.

4300 Marston Ave., ROBBINSDALE, MINN.

MONOTONY in Wheatley Faience is impossible, each tile having a soft beautiful shade, peculiar to itself, but only

to such a degree, that when en masse, makes a beautiful symphony of color. We are striving for the unusual things and claim nothing for uniformity. It is for that reason that our wares have won favor with Architects, and Decorators. Wheatley Faience tile can be furnished in any size, style or color and can be used for interior or exterior decorations. For sale by all leading tile Dealers.



Wheatley Garden Pottery is another product which has proven a success. No plot is so small or so large but that a piece or two of "Wheatley Weather-Proof" Garden Pottery will not beautify and add attractiveness to it. We carry a large selection of Garden Pottery including Bird Baths, Fountains, Bench Seats and Window Boxes. In fact everything and anything to add beauty to the home.

Garden Pottery catalog sent free on request Dealers Attention.

THE WHEATLEY POTTERY COMPANY

4625 Eastern Ave.

CINCINNATI, OHIO



COUPON

Fill Out—Mail Today

THE G. F. S. ZIMMERMAN CO., INC.

Frederick, Md. Please send me your booklet, "The Vogue in Shutters and Casements." It will tell me how all the trouble is taken out of shutters and casements.

Name

Address



Sunlight Control
the function of Shutter Fasteners

Shutters lend beauty to any home—keep out the heat of the sun in the summer; rain and sleet in the winter and also serve as protection against sneak-thieves and burglars.

But shutters have often been considered more trouble than use until the Zimmerman Fastener was devised to make handling easy.

Let us tell you why shutters and casements are coming back into STYLE.

THE G. F. S. ZIMMERMAN CO. INC.

9 Broadway
FREDERICK, MARYLAND

ZIMMERMAN

FASTENERS FOR SHUTTERS AND CEMENTS

Mr. Architect:

Let Us Solve Your Flag Pole Problems

Our 23 years of experience in the manufacture of STEEL TUBULAR FLAG POLES as an exclusive product has placed us in a position to offer to the architectural profession a service that will eliminate unnecessary loss of time and trouble in the architect's office.

WE WILL GLADLY SUBMIT DETAILS FOR ANY FLAG POLE INSTALLATION AND THESE DETAILS BECOME THE PROPERTY OF THE ARCHITECT WITHOUT OBLIGATION TO US.

Our TUBULAR STEEL POLES are as durable as they can humanly be made without frills and extravagance, as near 100% shop finish as the nature of the product will permit. They can be transported at the lowest possible freight rate and field labor of erection is reduced to the lowest minimum.

WE WILL BE PLEASED TO SERVE YOU.

The Pole and Tube Works, Inc.

Ave. D and Murray St.

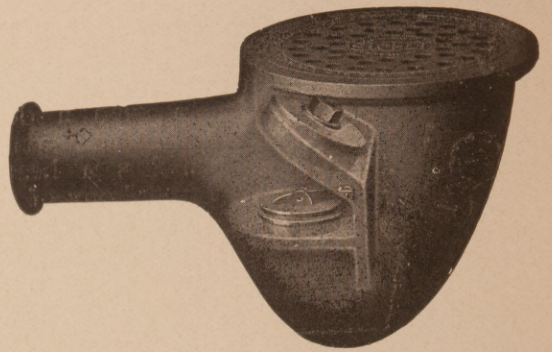
Newark, N. J.

SIGNET FLOOR DRAIN

The quality of material, the superiority of design, the absolute safety and reliability of operation, recommends the Signet for all high-class work where permanent satisfaction is sought.

Write for circular

CRAMPTON-FARLEY BRASS CO.
KANSAS CITY, MO.



THE BACK WATER TRAP DRAIN OF QUALITY

Don't Pay the Doctor!

Mr. Contractor:

Protect the hands of your workman by having them use our gloves in handling brick, stone and other rough material. It will save you money.

Let us show you how to eliminate this waste. Send today for a trial dozen pairs of our Tuff-Tanned Kantrip Mittens and a dozen pairs of our Hand Pads. Try out a pair of each on the hands of one of your workmen. Check the results carefully.

If after fair trial you are not satisfied with the results just return the remaining pairs at our expense. No obligation for this trial.

Write today.



\$7.80 per dozen—\$90 per gross



\$4.25 per dozen
\$48.00 per gross

Des Moines Glove & Mfg. Co.
508 Fourth Street Des Moines, Iowa

FOR THE NEW HOME

Pyrofuse
TRADE MARK

"The Modern Destroyer of Waste"

For it means better sanitation, greater convenience, and the absolute elimination of the garbage man and the garbage can. Just drop any and all household waste into the hopper, and once a week or so, light the gas burner for about half an hour.

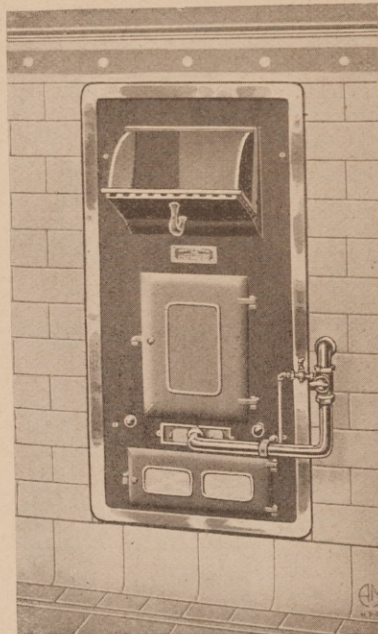
Many owners report an average monthly cost of 30c.

Pyrofuse is designed for COMPLETE DESTRUCTION of all kinds of household waste — is positive in action, and leaves nothing to chance.

Pyro is installed in the kitchen or service room — is beautiful in design and finish — is airtight and odorless. It uses natural or artificial gas. Many years of service and thousands of installations prove the

Pyrofuse method to be standard and dependable.

Our **Pyrofuse** booklet tells all about waste destruction, and is instructive to home builders. Mailed free on request.



Manufacturers of the most complete line of Incinerators in the United States.

J. B. PRESCOTT & SON, Wester, Mass.

PYROFUSE

(SEE SWEET'S 18TH EDITION: PAGE 2343)

MR. CONTRACTOR, MR. BUILDER

LOOK at *This Mixer*. We call it an AVAILABLE machine, and you will appreciate that, because by available we mean that it can be easily handled and to decided advantage in every accessible place. Take the VANDOLCO Mixer to any place on any job and it will fit, work fast, save money and make good. This new VANDOLCO Mounted Mixer is backed by seven years of satisfaction-giving service.

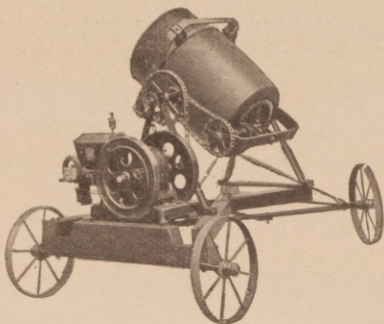
IT NEVER SHIRKS, IT ALWAYS WORKS.

Write Today. Do not wait. You need this Mixer.

Van Dolsen Manufacturing Co., Dept. S.

SHELBYVILLE,

INDIANA



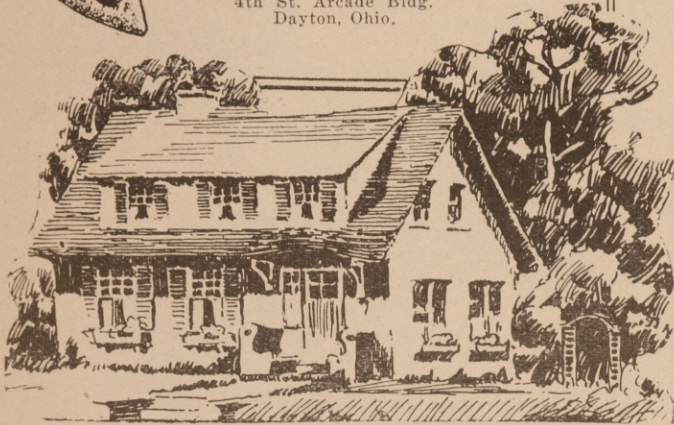
MORE SALES *and* BETTER SALES

is an object to every progressive dealer. Quality stucco can be depended upon always to produce more and better business.

Flint Rock represents stucco of super quality. The kind that makes more and better satisfied customers, as well as larger profits, for you.

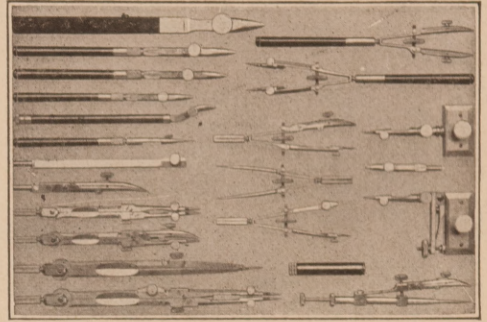
Write for our dealer proposition.

Main Office
Dayton Builders' Exchange
4th St. Arcade Bldg.
Dayton, Ohio.



THE FLINT ROCK STUCCO CO., Inc.

MAGNESITE STUCCO GRANITE DASH INTERIOR FLOORING



Altener Drawing Instruments



Appreciated the world over for their excellence and universally used by the expert engineer and architect

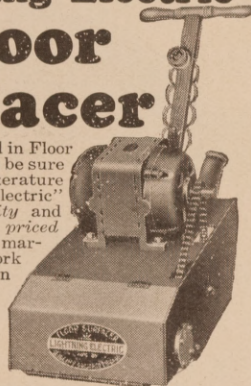
Catalogue on request

THEO. ALTENER & SONS
1217 Spring Garden St. Philadelphia, Pa.

There Is No Better Machine Made Than the "Lightning Electric" Floor Surfacer

If you are interested in Floor Surfacing Machines be sure to write for the literature on the "Lightning Electric"—the *highest quality* and most *economically priced* floor surfacer on the market. Will do the work of six to eight men and do it better.

No Old-Fashioned Side Roller



The "Lightning Electric" will surface right up to quarter round without the use of the Old-Fashioned and cumbersome side roller. Leaves NO waves or chatter marks in the roughest floors—will NOT vibrate.

**Five Day Free Trial
and Five Year Guarantee**

Write for our five day free trial and our five year guarantee on the best Floor Surfacing Machine the world has ever produced. Costs you nothing to investigate and the machine pays for itself the first month. A business making proposition for the contractor or individual—write today.

National Sanding Machine Company
Formerly The Globe Mfg. & Dist. Co.

Sales Office:
20 East Jackson Blvd. Chicago, Illinois

AUTOMATIC TOOL CO.

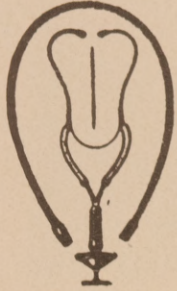
Maplewood, N. J.

Manufacturers of the
LION DOOR CLAMP

Write for descriptive
circulars and prices.

Watch this space
for particulars.

Transmit-O-Phone



Why guess the location of a hidden or leaking pipe or tap?

Use this instrument and be positive about it.

Price \$6 Postpaid

O'Donnell Specialty Co.

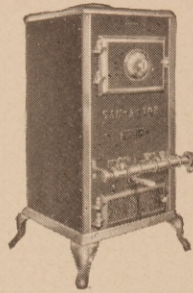
93 Lexington Avenue New York

SAN-A-TOR

Garbage and Rubbish INCINERATOR

Portable and Wall Type
Free from cost of repair up-keep.

Let us tell you about it.
Types from 1/2 bushel up to 1 Ton.



The Pittsburgh Incinerator Mfg. Co.

231-33-35 First Ave.

Pittsburgh, Pa.

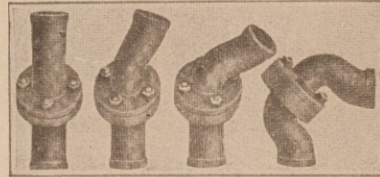
Two Textures **RedTEX FACE BRICK** Flashed Brick

LOCK HAVEN BRICK & TILE COMPANY

Brick of Quality

LOCK HAVEN

PENNA.

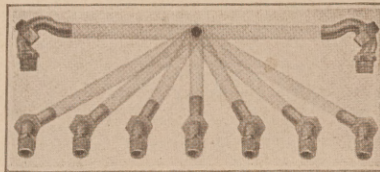


Universal Pipe Unions adjustable to any degree from right angle to straight line.

Use the Connor Universal Range Boiler Unions. Saves time and fittings.

Made to make good.

M. A. Connor,
Lockport, N. Y.

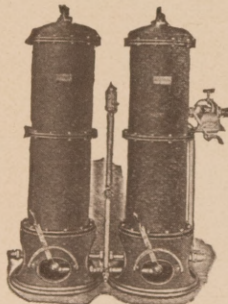


For Removing Iron Discoloration from Water



Many well waters and sometimes other water supplies have iron in them which shows up as a slight cloud or a reddish discoloration.

This stains clothes, linens, basins, tubs, etc., and often makes laundry work impossible.



A LOOMIS-MANNING filter will remove this iron rust and stain, in a simple way without the use of any chemicals. When filtered, such waters are especially fine for all uses.

Send for Information

Loomis-Manning Filter Distributing Company

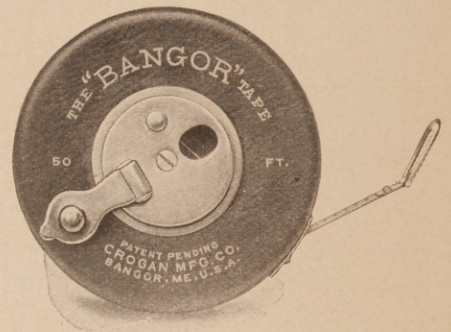
Estab. 1880

1451 S. 37th St.

Phila, Pa.

INTRODUCING THE

"BANGOR"
Leather-Covered Steel Tape



Made by the manufacturers of the well-known "ONE-MAN" tapes. An improved leather-covered steel tape, with the cover permanently attached to the steel case by our new patented process. *No stitches to come out.* Highest grade "Galloway" used for covers; nickel-plated drum and trimmings.

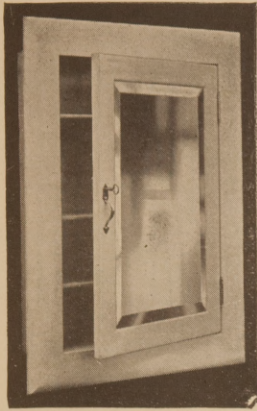
This new tape has all the advantages of the old-style leather-covered cases, and, besides our special method of attaching the leather, it has our improved drum and knock-out. Like all Crogan tapes, the accuracy is guaranteed.

If you want a leather-covered tape, see this tape at your dealer's before you buy, or order from the factory.

PRICES: 25 ft., \$3.50; 50 ft., \$4.50; 75 ft., \$5.50

CROGAN MFG. CO., Bangor, Me.

Makers of the ONE-MAN tape



MEDICINE CABINETS

"SELECTED WOODS"

Finished Pure White Enamel inside and out.

Our No. 18 Catalogue on request.

Universal Cabinet Co.

Manufacturers

1812-28 W. Austin Ave.
CHICAGO, ILL.

MAPLE FLOORING OAK BEECH BIRCH

Moulding and Poplar Bevel Siding

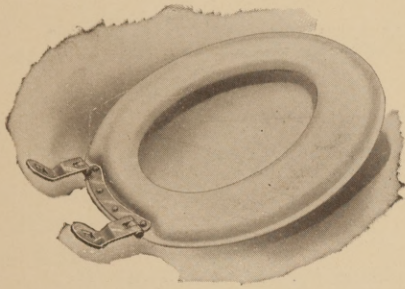
JOINTED MAPLE FLOORING and other Hardwood Specialties for use in Cotton Mills

WHOLESALE

CLAUDE A. CARTER

Manufacturers' Representative

1507—4th NAT'L BANK BLDG. ATLANTA, GA.
Long Distance Phone



THE McCORD White Steel Metal Toilet Seats

A Positive Proof Against What

GERMANS CALL GERMS
FRENCH CALL PARIS-ITES
IRISH CALL MIKE-ROBES

INQUIRE OF

DEAN METAL CO.

3662 Park Ave.

ST. LOUIS, MO.

The Stephany Gas Burner



Burns 95% Air

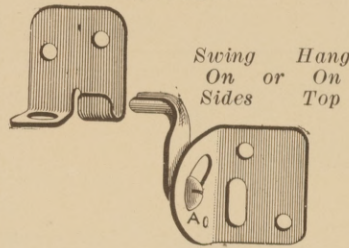
It has no adjustment on the air or gas and it gives the most perfect and hottest blue flame of all furnace burners.

Houses of 3 to 10 rooms can be heated for about forty cents a day. This means business for you. Send for particulars.

Sanitary Plumbing & Heating Co.

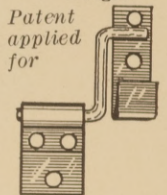
Newport, Kentucky

No. 26 Hauser Adjustable Three Way Hanger



Swing Hang
On or On
Sides Top

No. 27 Hauser Adjustable Hanger



Patent applied for

For full and half size window screens and storm sash

When you screen a house you use a fine mesh wire cloth to keep out all insects, but to do that you need a good hanger to hold the screen tight against stops which is what Hauser Hangers will do.

These hangers can be used on any thickness of screen or casing as they are adjustable.

You will save 25% on lumber and labor, also you will have a satisfied customer.

The difference between the two above hangers is that the No. 26 Hauser Three Way Hangers will hang on the top or side.

Millions of screens are hanging on Hauser Hangers. Recommended by Leading Architects, Screen Makers and Building Contractors.

No. 26 Hangers, \$1.75 per dozen sets, galvanized finish, packed with screws.

No. 27 Hangers, \$1.00 per dozen sets, galvanized finish, packed with screws.

No. 33 Hangers, \$2.00 per dozen sets, solid brass, packed with screws, same as No. 27 Hangers.

Free samples sent on request.

MARTIN HAUSER MFG. CO.

413 PRESCOTT ST.

TOLEDO, OHIO

ENAMELED BRICK FOR RESIDENCES

A bright, clean and thoroughly sanitary exterior is most essential for the modern residence.

The Beauty and Individuality, as well as the permanent qualities of

"ENAMELED BRICK"

should also be taken into consideration when preparing your plans and specifications, for exterior as well as interior.

American Enameled Brick & Tile Co

*Manufacturers of Enameled and Fire Brick.
Dealers in Face Brick of all Colors and Textures.*

52 Vanderbilt Avenue New York

Samples on display in Architects Samples Corporation, New York City. See pages in Sweet's Architectural Catalogue, also Specification Data.

WILLIAMSON & ADAMS

Contractors for

Metal Lathing and Iron Furring

Metal Corner Bead

151 EAST 38th STREET

NEW YORK

Telephone: Vanderbilt 1187-88-89



Plastic-Rok Composition Flooring

The ideal floor for Schools, Public Buildings, Stairways, Offices, Vestibules, Kitchens and Bathrooms.

Many contractors are building a profitable business laying Plastic-Rok Floors.

Prices, samples and instructions furnished on application. Many pleasing colors.

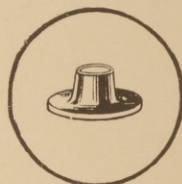
Fireproof—Flexible—Waterproof—Hygienic

PLASTIC-ROK CO.
SPRINGFIELD, OHIO

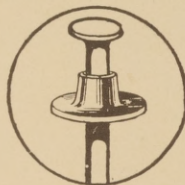
Plastic-Rok Flooring

MR. CONTRACTOR-- YOU CAN SAVE MONEY

on your next job of reinforced concrete work if you will use



The Collar



On the Nail
They will

**SAVE LUMBER
SAVE IN LABOR**

**REDUCE THE COST OF
REMOVING FORMS**



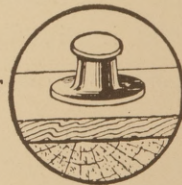
In the Claw

PULL-EASY
TRADE MARK

NAIL COLLARS

PATENTED


in building the forms and the scaffolding.



In Place

Once Used
Always Used
Manufactured by
PRECISION METAL WORKERS
3100-3112 Carroll Ave.
CHICAGO, ILL.

Write for Full Descriptive Circular and Free Sample



REFERENCE DIRECTORY FOR BUYERS

Alphabetical Index Page 116

ARCHITECTURAL OFFICE SUPPLIES.

Altender & Son, Theo.
Alwar Desk Co.
Hamilton Mfg. Co.
Higgins & Co., Chas. M.
Koh-I-Noor Co.
Weber & Co., F.
Wood-Regan Instrument Co.

BIRD HOUSES.

Jacobs Bird House Co.
Crescent Birds House.

BLACKBOARDS.

Rowles, E. W. A.

BLINDS.

Farley & Loetscher Mfg. Co.
Wilson, J. G. Corp.

BLUE PRINTS.

Wickes Bros.

BRACKETS—ROOF, LADDER.

J. L. Austin Mfg. Co.
Gauss Mfg. Co.

BRICK.

Alpha Tile Co.
Amer. Enameled Brick & Tile Co.
American Face Brick Association.
Bradford Brick & Tile Co.
Hocking Valley Fire Clay Co.
Hood Brick Co., B. Mifflin.
L. A. Pressed Brick Co.
Locke Haven Brick & Tile Co.
Pace Brick Co.
Shope Brick Co.
Summitville Face Brick Co.
Western Brick Co.

BRIDGES—IRON & STEEL.

Farris Bridge Co.
Roanoke Iron & Bridge Co.

BRONZE FIXTURES, TABLETS, ETC.

Art In Bronze Co.
Clark, R. W. Mfg. Co.
Guth, Edwin F., Co.
Heath, J. S. Co.
Highton, Wm. & Sons Co.

BUILDING AND BUILDERS' SUPPLIES.

Babcock Co.
Compact Clothes Hanger Co.
Des Moines Glove Co.

CELLAR DRAINERS.

Kemp, C. M.
Penberthy Injector Co.

CEMENT, LIME AND ALLIED PRODUCTS.

Dixie Portland Cement Co.
National Lime & Stone Co.
Palmer Lime & Cement Co.
Southern Gypsum Co.
Texas Cement Plaster Co.
Waller-Crow, Inc.

CONCRETE PRODUCTS AND MACHINERY.

Binsteel Mfg. Co.
Bull Dog Floor Clip Co.
Kent Mch. Co.
National Sanding Mchry. Co.
New Way Mfg. Co.
Stowell Laboratory.
Wiebe & Son, P. M.
Van Dolsen Mfg. Co.

DOORS—ELEVATORS, SHUTTERS, FIXTURES.

Automattc Tool Co.
Farley & Loetscher Mfg. Co.
Merchant & Evans Co.
Seawell, Luke.
St. Louis Firedoor Co.
Teneco Sales Corpn.
Whittaker, John & Co.
Wilson Corpn., J. G.

ELECTRICAL EQUIPMENT.

Adam, Frank, Electric Co.
Connecticut Electric Mfg. Co.
Seawell, Luke.

ELECTRIC TIME SYSTEMS.

Landis Engineering Co.

ELEVATORS, DUMBWAITERS AND SUPPLIES.

Amer. Elevator & Mch. Co.
Elevator Locks Co.
Elevator Supply Co.
Ideal Electric Dumbwaiter Co.
Kaestner & Hecht Co.
Peelle Co., The.
Storm Mfg. Co.

FENCING—IRON, CHAIN, LINK WIRE.

Stewart Iron Works Co.

FILTERS.

Loomis-Manning Filter Distributor Co.

FLAG POLES.

The Pole & Tube Works.

FLOORING.

Carter, Claude A.
Del Turco, L. & Bros.
Hachmeister-Lind Co.
Mueller, Franklyn R., Inc.
Oak Flooring Bureau.
Wood Mosaic Co.

FLOOR HARDENERS AND SURFACING MACHINES.

Amer. Floor Surfacing & Mch. Co.
Cal Chemical Co.
Cavicchi Polishing Co.
Schlueter, M. L. & Co.

FURNITURE.

Sinclair-Allen Co.
Winthrop Furniture Co.

GLASS.

Amer. Window Glass Co.

GREEN HOUSES.

Hitchings & Co.

HARDWARE.

Goldblatt Tool Co.
Ives, H. B. & Co.
Park Mfg Co.
Shelby Spring Hinge Co.
Tellers Colonial Hardware Co.

HEATING EQUIPMENT—ALLIED PRODUCTS.

Carrico, Wm. G.
Cleghorn Co.
Connor, M. A.
Dahlquist Co.
Ford & Son, Perry M.
Forest City Fdry. & Mfg. Co.
Franklin Gas Burner Co.
Geneva Heater Sales Corp.
Gurney Heater Mfg. Co.
Hawley Down Draft Furnace Co.
Highton, Wm. & Sons Co.
Healey-Ruff Mfg. Co.
Hutchison Regulator Co.
Jennison Co., The.
Johnson Service Co.
Meyer Bros., F.
Norrystown Magnesia & Asbestos Co.
Novelty Steam Boiler Works.
Quad Stove Co.
St. Clair Foundry Corpn.
Trolley Supply Co.

INCINERATORS.

Kerner Incinerator Co.
Pittsburgh Incinerator Co.
Prescott & Son, J. B.

KITCHEN EQUIPMENT.

The Wright Co.

LATHS—METAL, WOOD.

Expanded Wood Lath Corpn.
Merwin Mfg. Co.
Milwaukee Corrugating Co.

DEL TURCO

Terrazzo Floor Divider and Corrugated Brass Strips

THE corrugation—(see cut below)—in the Del Turco Continuous Strip, holds it in its correct relation to the finished floor, but it has no perforations which lock the terrazzo panels together. That is why we can guarantee a Del Turco laid floor against cracks for a period of three years. Look for complete data in Sweet's, 17th Edition, pages 392-393.

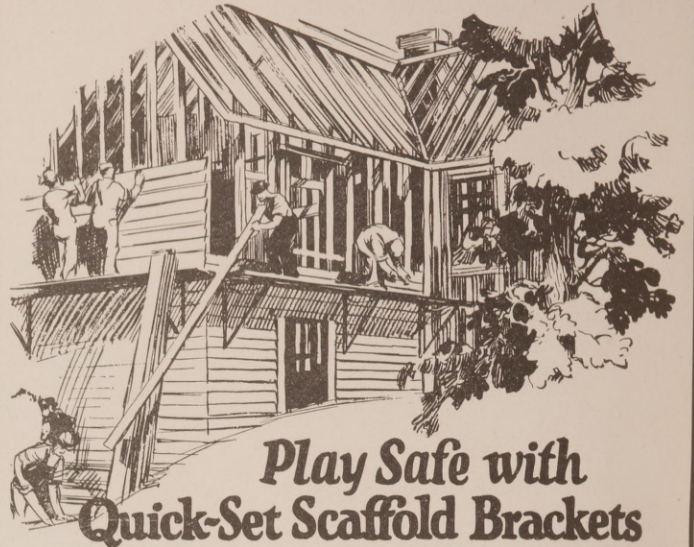
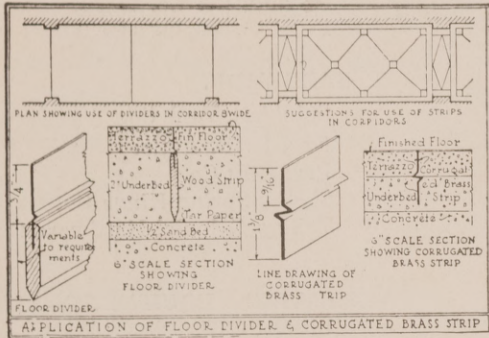
229 Cleveland Ave.

L. DEL TURCO AND BROS.

229 Cleveland Avenue

HARRISON

NEW JERSEY



Play Safe with Quick-Set Scaffold Brackets

These days building contractors must play safe. They must safeguard their men and profits with dependable equipment. And they do. Contractors using Quick-Set scaffold brackets tell us they are the surest, safest, they have ever used. Quick-Set scaffold brackets are made of all steel—assure you against side-swing and can be put up in a hurry by one man. Investigate them NOW. We can make dealers an attractive arrangement. Write us today.

J. L. AUSTIN MANUFACTURING CO.
64 Main Street Menomonee Falls, Wisconsin



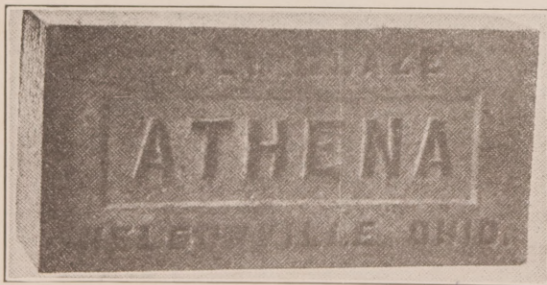
The Better Quality

of ATHENA brick in Buff, Golden and Mahogany tones, combined with the Excellent Service and wholehearted co-operation with the dealer, has made possible our large sales this year.

Send for samples of ATHENA brick today.

You will not be obligated for any service we can give you

The Hocking Valley Fire Clay Company
Nelsonville, Ohio



Victor Parting Beads

are TROUBLESAVERS

for THE ARCHITECT

We desire some live, exclusive Distributors, able to figure with Architects and Contractors. Only financially responsible parties of proven ability please apply.

They are the only device which makes doublehung Windowsash:

STICKPROOF } disregarding of
RATTLEPROOF } paint and all
DUSTPROOF } swelling, warp-
DRAFTPROOF } ing and shrink-
ing of Lumber.

Many of the foremost Architects of the country specify VICTOR PARTINGBEADS regularly.

Victor Partingbeads save from 4-6 feet of radiation per window. Buildings completely equipped cost less than without. Estimates furnished free.

"It is not the expansion and contraction in width or height of sash that makes sash stick or rattle but the variations in thickness." The Victor Partingbead follows the sash under all conditions!

ADDRESS:

The Victor Parting Bead Company
READING, PA.

Reference Directory For Buyers Continued

LIGHTING FIXTURES.

Erie Fixture Co.
Guth, Edwin F., Co.
Planetlite Co.
Robert Phillips & Co.
Smyser-Royer & Co.
Queen Mantel & Tile Co.
Warren, W. G.

LUMBER.

Anderson Lumber Co.
Eastman-Gardiner Co.
Enochs Lumber Co.
Roddis Lumber & Veneer Co.

MANTELS.

Arnold & North.
Farley & Loetscher Mfg. Co.
Jacobson & Co.
Queen Mantel & Tile Co.

MAIL CHUTES—BOXES.

Cutler Mail Chute Co.
Penn-Greg Co

MARBLE.

Ga. Marble Co.

METAL PRODUCTS.

Erdle Perforating Co.

MORTAR COLORS.

Blue Ridge Talc Co.
Chattanooga Paint Co.
Martin & Co., L.
Tamms Silica Co.
William & Co., C. K.

PAINTS, VARNISHES AND DECORATION.

Amer. Cement Paint Co.
Cooledge & Son, F. J.
Glidden Co.
Jamestown Paint & Varnish Co.
Nelson, W. P.
Smith, Edward & Co.

PARTITIONS.

Miess-McKay Building System.
Southern Gypsum Co.
Wilson, J. G. Corp.

PIPE AND PIPE MACHINERY.

Kidder & Co., J. F.
McCracken Mfg. Co.

PLUMBING AND BATHROOM EQUIPMENT.

Bayridge Specialty Co.
Beggs Engineering Co.
Bradley Wash Fountain Co.
Church Co., C. F.
Clow, James B.
Crampton-Farley Brass Co.
Dean Metal Co.
Drop Forging Co.
Eisele, Louis F. & Son.
Eustis Mfg Co., J. P.
Fairfacts Co., The.
Fords Porcelain Works
Harroun Co., W. L.
Hedges & Brother.
Hessler Co., H. E.
"I-X-L" Pump & Mfg. Co.
Kemp Mfg Co., C. M.
Luzerne Mfg. Co.
Marcy Stove Repair Co.
Newark Fireproof Door Co.

O'Donnell Specialty Co.

Rundle-Spence Mfg. Co.
Sanitary Plumbing & Heating Co.
Sturdy Mfg. Co.
Superior Brass Co.
Superior Skylight Co.
Universal Cabinet Co.
Wheeling Sanitary Mfg. Co.

POTTERY.

Wheatley Pottery Co.

PUMPS, MOTORS—GAS, ELECTRIC.

New-Way Motor Co.

REFRIGERATORS—MCHY., ETC.

Enterprise Mfg. Co.
Herrick Refrigerator Co.

ROOFING AND ROOFING PRODUCTS.

Aluminum Architecture Co.
Crescent Brass & Pipe Co.
Forming Mchry. Corp.
Knickerbocker Slate Co.
Pearson Mfg. Co.
Penn. Structural Slate Co.
Rising & Nelson Slate Co.
Sheldon, F. C. Slate Co.
Transfer Stained Shingle Co.
U. S. Roofing Tile Co.
Vendor Slate Co., Inc.
Walker Roofing Co.

SAFES.

Hall's Safe Co.

SAFETY TREADS.

Universal Safety Tread Co.

SEWAGE DISPOSALS.

Sanitary Engineering Co.
United Cement Products Co.
Universal Concrete Products Co.

SLAG—GRAVEL.

Birmingham Slag Co.
Hoadley & Sons Co., J.

STAIRWAYS.

Bessler Movable Stairway Co.
Farley & Loetscher Mfg. Co.

STRUCTURAL STEEL AND ORNAMENTAL IRON.

Ferro Studio, Inc.
Grainger & Co.
Ingalls Iron Works Co.
International Steel & Iron Co.
Knoxville Iron Co.
Lombard Foundry & Mch. Co.
Marsh, James R.
Meyers, Fred J. Mfg. Co.
Phoenix Bridge Co.
Pipe Railing Const. Co.
Snead Architectural Iron Works.
Standard Iron & Wire Works.
Stewart Iron Works.
Turner, C. A. P.

TERRA COTTA.

Atlanta Terra Cotta Co.
Seawell, Luke.
Winkle Terra Cotta Co.

TILE—BLOCKS, ETC.

Alpha Tile Co.
Roddan & Cammarata Tile Co.
Carmichael Tile Co.
Sou. Mosaic Tile Co.
Phoenix Tile Machine Co.

TRANSITS AND LEVELS, TAPES.

Crogan Mfg. Co.

VENTILATING EQUIPMENT.

Allen Air-Turbine Ventilator Co.
Massachusetts Blower Co.
Royal Ventilator Co.
Seawell, Luke.

WARDROBES.

Evans, W. L.
Wilson, J. G.

WALL BOARD AND PLASTERING MATERIAL.

Everlastone Products Co.
National Magnesite Stucco Co.
Plastic-Rok Co.
Flint Rock Stucco Co.
Southern Gypsum Co.

WALL COATING.

Alabastine Co.
Simmons-Gardner Co.

WATERPROOFING.

Amer. Algen Products Co.

WEATHERSTRIPS.

Wirfs, E. J.

WINDOW ACCESSORIES—BLINDS, SHADES, ETC.

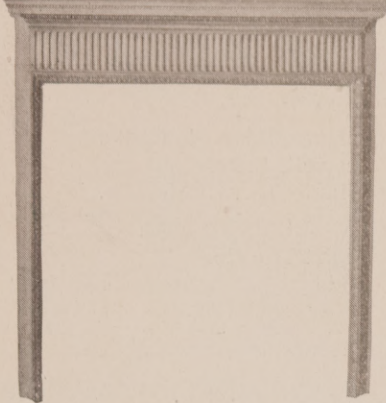
Belmer, H. Co.
Burlington Venetian Blind Co.
Caldwell Mfg. Co.
Carrier Adjuster Window Co.
Casement Hardware Co
Dowman, Geo.
Farley & Loetscher Mfg. Co.
Kuhls, Fred B
Luther O. Draper Shade Co.
Martin-Houser Co.
Oscar C. Rixson Co.
Samson Cordage Works.
Silver Lake Co.
Smith & Egge Mfg. Co.
Swedish Venetian Blind Co.
Taylor-Allen Co.
Triangle Tool & Die Co.
Victor Parting Bead Co.
Wilson, J. G. Corp.

WINDOWS.

Andersen Lumber Co.
Seawell, Luke.

WOODWORK AND WOODWORKING MACHINERY.

Colgan Mch. Co.
C. H. & E. Mfg. Co.
Dewalt, R. E.
Gustafson & Scott Mfg. Co.
Hartman-Sanders Co.
Johnson Mfg. Co.
Marshall Mfg. Co.
Oliver Machy Co.
Ornament Products Co.
Perfection Mortiser Co.



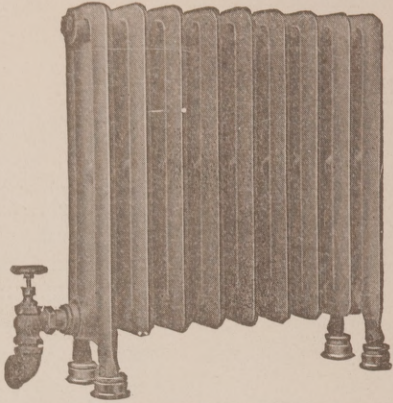
*Reproductions of
Early American
Mantelpieces and
Fireplace
Accessories.*

—
*Booklets on
request.*

—

**ARNOLD &
NORTH, INC.**
129 East 41st St.
New York

ADJUSTABLE FOOT



The Jennison Adjustable Foot jacks it up in a jiffy.

Simply the twist of your wrist unscrews it—raises it or lowers it as you desire.

A sample will be sent free upon request. Sold by jobbers.

Jennison Co.
FITCHBURG, MASS.

Caldwell Sash Balances Uniform Mortises



For use in all classes of new work. Box frames unnecessary. Mortise cut at mill reduces cost of installing. Counterbalance sashes perfectly unaffected by atmospheric conditions. Cheapest method for modernizing old windows, as alterations in sashes and frames are not necessary.

Have stood the test of service upwards of 33 years.

Write for Circular.

CALDWELL MFG. CO.
39 Jones St. Rochester, N. Y.

Pat. Pend.

THE WINKLE TERRA COTTA CO.

Manufacturers of

Architectural Terra Cotta

ALL COLORS

502-3 CENTURY BUILDING

ST. LOUIS, MO.

CARMICHAEL TILE COMPANY

General Tile Contractors

Samples and Designs on Request.
Pleased to Furnish Estimates.

"We go anywhere."

HURT BLDG. ATLANTA

THE ROOF OF ETERNAL YOUTH.


SHELDON'S
RED. GREEN. PURPLE. BLACK
SLATES

Made in a wide range of sizes and thicknesses. Unusually distinctive color combinations that harmonize with building and surroundings. Quality, price, and service unequalled. See Sweet's Catalogue. Booklet and full particulars on request.

F. C. SHELDON SLATE COMPANY,
Granville, New York.

For many years

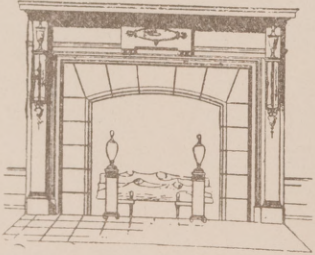
Jacobs Bird Houses



have been purchased by thousands all over the country, because they are beautiful and uniformly successful. To have birds live about your home YOU need know little about their habits—WE know how to make houses that birds will occupy. Thousands of testimonial letters prove that. Write for our new 1923 FREE booklet showing 25 Nest Boxes and Colony Houses from \$1.50 to \$125.00.

JACOBS BIRD-HOUSE AND MANUFACTURING CO.
Waynesboro, Pa.

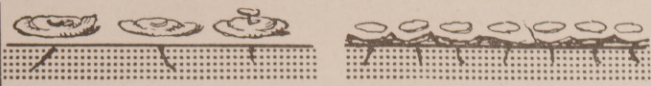
WOOD AND TILE MANTELS



Tile Floor and Wall Contractors

Lighting Fixtures

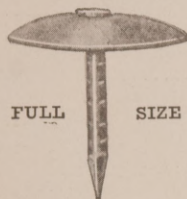
QUEEN MANTEL & TILE COMPANY
56 W. Mitchell St. Atlanta.
Established 1909
Write for catalogue and prices.



The Tin and Nail Trouble The Small Nail Trouble

Avoid These Troubles—Use
SIMPLEX
ROOFING NAILS

Time Savers



FULL SIZE



Simplex are used on roofing, roof covering, veneering — also lining and covering buildings, tacking signs, export packing, etc.

There can be no trouble with the Simplex Roofing Nails.

They can be driven from any angle and the large head, well riveted, prevents them from being driven through the roofing like the old style roofing nail or wire ring head.

The head is made from heavy stock, is curved and edge positively will not curl up when driven, besides being four times the area of large-headed nails. They are quicker to lay, taking but one-quarter the time that a tin cap and nail requires.

The head resists rust.

Order your prepared roofing to come with Simplex nails. 1" for laying new roofs. 1 1/2" for laying roof over shingles.

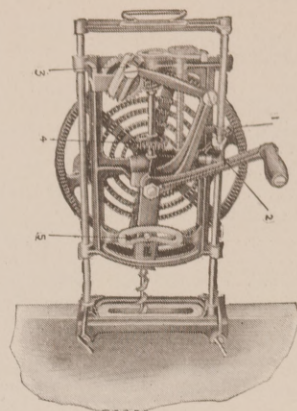
Order from your jobber or send us your inquiries.

Crescent Brass & Pin Co.

SOLE MANUFACTURERS

DETROIT,

MICHIGAN



The
Perfection Mortising Machine

Will cut a perfect Mortise for Door Lock in less than five minutes without use of any other tool. Any size from round hole to six-inch slot. Automatic in operation. Write for free trial offer or secure it from your dealer.

Manufactured by

Perfection Mortiser Company

141 WATER ST.,

COLUMBUS, OHIO

INDIANA LIMESTONE

FOR ALL BUILDING PURPOSES

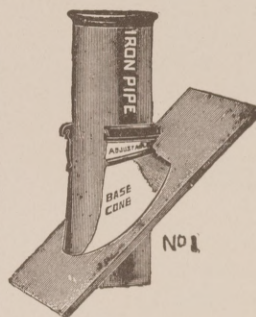
Sawed, Planed, Turned, Cut and Block

See that you have a price from our Company before placing order. Plans will be returned promptly if sent for estimate.

J. Hoadley & Sons Company, Inc.

P. O. Box 83.

Bloomington, Ind.



THE HESSLER FLANGE

Millions in use. Made of Copper, Zinc or Galvanized Iron. Sold by leading jobbers throughout the U. S. and Canada or shipped direct from factory.

Write for prices.

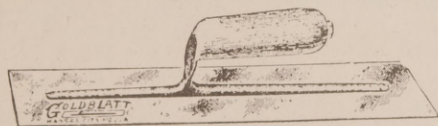
Adjustable

H. E. HESSLER CO.

Sole Manufacturers

Syracuse, N. Y.

GOLDBLATT CEMENTER'S TROWEL



It's made particularly to please the Expert Cement Finisher. Especially adapted for fine soft work. Blade ground extra thin.

Three Sizes

11 in. x 4 1/4 in. \$2.75

12 in. x 4 1/4 in. \$2.95

14 in. x 4 1/4 in. \$3.25

Order From This Ad.

Why Use a Heavy and Clumsy Trowel? Buy a Goldblatt No. 2 C. F.

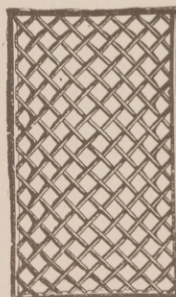
Ask for our Free 104-page Catalog.

GOLDBLATT TOOL CO.

1522 C WALNUT ST.

KANSAS CITY, MO.

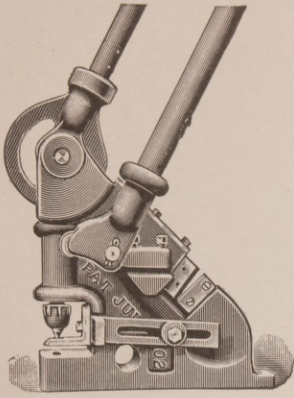
THE FRED J. MEYERS MFG. CO.
Hamilton, Ohio



Manufacturers of
Folding Gates

- Elevator Cars and Enclosures
- Bank and Office Railings Wickets
- Grilles Window Guards
- Stable Fittings Iron Marquis
- Stairways Balustrades Balconies
- Gratings Jail Work
- Fire Escapes Builders' Iron Works
- Wire and Iron Lawn Furniture

Ornamental Wire, Iron and Bronze



Little Blacksmith

Punch, Shear and Bender Combined

This machine punches, shears and bends. Performs the three separate and distinct duties without readjustment, and is the most compact and efficient machine on the market. The punch in no way conflicts with the shear and bender, or vice versa. Their relations are identically the same as the claw is to the claw hammer.

It is the only practical punch, shear and bender on the market for Plumbers, Steam Fitters, Cornice Shops and Ornamental iron workers. All parts interchangeable.

J. F. KIDDER MANUFACTURING CO.

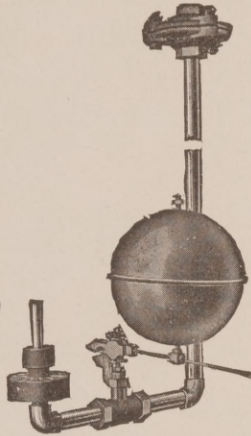
BURLINGTON

VERMONT

The Climax

Cellar

Drainer

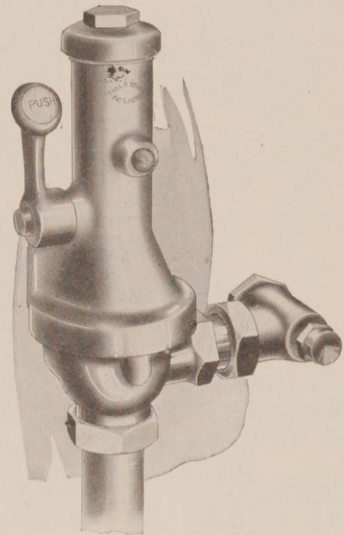


Why use uncertain and costly waterproofing or cement, asphalt, tar, etc., when the CLIMAX Cellar Drainer is so positive, dependable and inexpensive? The CLIMAX is usually installed in the end, why try something else in the beginning?

THE C. M. KEMP MFG. CO.
405-413 E. OLIVER STREET
BALTIMORE, MD.

A FLUSH VALVE OF A SUPERIOR ORDER

The highest standard of excellence
For long life and endurance



A POSITIVE, UNQUESTIONABLE, NOISELESS FLUSH---THE ARCHITECT'S FACTOR OF SAFETY.

For the high class Sanitary System
Specify it—Use it—You will have no other.
ABSOLUTELY GUARANTEED.

BEGGS ENGINEERING COMPANY

142 Russ St.

HARTFORD, CONNECTICUT

L. & C. Hardtmuth's

"KOH-I-NOOR"

PENCILS IN 17 DEGREES AND COPYING.

BEST FOR EVERY PURPOSE AND THE MOST ECONOMICAL.

SUPPLIED BY ALL DRAWING MATERIAL DEALERS AND STATIONERS

There is nothing

mysterious or complicated about

The ARTISAN BOLT

just a simple, well-made bolt, designed to operate easily in spite of door imperfections.

"it draws"—

That is why the door locks so easily in the hands of every well pleased owner.

There is a growing list of Architects who specify it. There is an increasing number of Hardware men who buy it. No well chosen stock of builders' hardware is complete without



For **Factory Doors and Garage Doors**

Suitable for any length door up to eleven feet. Reversible for right or left hand operation.

ASK US ABOUT IT.

Manufactured by
JOHN WHITTAKER & CO.
DETROIT, MICH.
LUKE SEAWELL
Southeastern Rept.
Atlanta, Ga., Charlotte, N. C.



PAT'D
MAY 4, 1920

C. P. TANNER

MANUFACTURER

Metal Cornices

Ventilators

Skylights

Windows

Marquise

Work According to Architect's Drawings

Strictly High-Class Work

General Sheet Metal Work

HENDERSON, N. C.

SUPERIOR BALL COCK

SIMPLE IN CONSTRUCTION
PERFECT IN OPERATION



NOISELESS

Operates with absolute satisfaction under either high or low pressure.

GUARANTEED

All parts are interchangeable.

By unscrewing the Cap on the side of the valve, access is given to the washer, which is simply extracted or inserted and rests between the valve seat and Plunger. Plunger is actuated by a compound leverage causing valve to function without leaking, against high pressure.

Manufactured by

SUPERIOR BRASS MFG. CO.

185—5th Avenue,

PATERSON, N. J.

Weatherbest STAINED-SHINGLES

UP THE SIDEWALLS with WEATHERBEST Stained Shingles of one color, laid at wide exposure, then across the roof with a WEATHERBEST Variegated Color Scheme—an excellent treatment of exterior walls—one that results in a pleasing "something different."

This is only one of the many ways in which All Clear, All Vertical Grain WEATHERBEST Stained Shingles can be used with a certainty of desired results.

WEATHERBEST Variegated Color effects are truthfully reproduced in our Folder B-6 which will be mailed on request.

TRANSFER STAINED SHINGLE CO., Inc.

Manufacturers of WEATHERBEST Stained Shingles

Main Office: North Tonawanda, N. Y.

Western Plant: Minnesota Transfer, Minn.

Architect H. R. Graf used large 24-inch WEATHERBEST Silver Gray Stained Shingles on the sidewalls and 16-inch WEATHERBEST Green Stained Shingles on the roof of this attractive residence at Jackson, Mich. Owner, W. B. Magel.





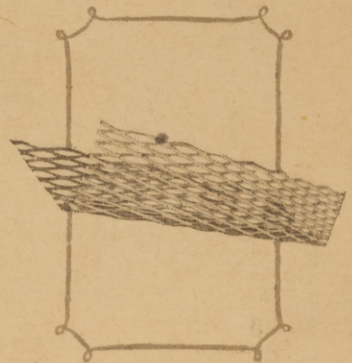
MILCOR metallic construction makes it possible to exclude today in any building, faults which formerly could not be avoided in the most elaborate homes. The expanded metal mesh of these most modern building products dissipates the stresses and shocks that cause cracking in walls of ordinary construction and provides a rigid metal foundation that keeps them true and beautiful throughout the entire life of the building. While the cost of metal for this permanent, *firesafe* construction is slightly more than that of old-fashioned wood, its erection effects such savings in labor that in many instances these better homes are actually built for less.

Complete information on any of the MILCOR Metallic Building Products will be supplied promptly on request.

MILCOR Expansion Metal Trim
MILCOR Expansion Corner Bead
MILCOR Expansion Base Scream

MILCOR Invisible Picture Molding
MILCOR Netmesh Metal Lath
MILCOR Stay Rib Metal Lath

Milwaukee Corrugating Company
 Milwaukee • Kansas City • Minneapolis



MILCOR Expansion Corner Bead for inside corners is placed directly over the lath, the plaster keying through both for great strength and rigidity. The straight metal edge provides a perfect guide for the workmen, assuring true walls for more beautiful rooms. The expanded metal construction dissipates stresses and prevents cracking of the plaster. This is one of the MILCOR metallic products for better buildings.

MILCOR

METALLIC BUILDING PRODUCTS



ARCHITECTURAL BRONZE

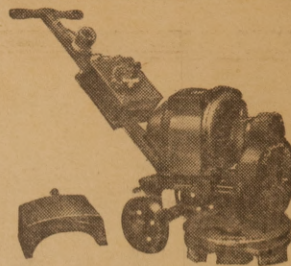
FOR

**BANKS
BUILDINGS
MAUSOLEUMS
RESIDENCES**

J. S. HEATH COMPANY

WAUKEGAN, ILL.

CHICAGO OFFICE: RAILWAY EXCHANGE BLDG.



CAVICCHI

Floor Surfacers

The best and cheapest way to surface marble, terrazzo, mosaic concrete, granolithic and all composition stone flooring.

SIMPLE — COMPACT — EFFICIENT

Made in two sizes, both electrically operated and equipped with the special **FLEXIBLE WHEELS.**

No. 14—2 H. P. Surfacers

We'll be glad to send you a booklet and prices.

Cavicchi Polishing Machinery Co.

62-66 Walnut St.

Neponset, Boston, Mass.

Manufacturers of Floor Surfacers—Wall and Base Rubbing Machines—Cast Concrete Stone Polishers.

Resisto Plastic Products

Made from ashes, sawdust, and cinders, fireproof, insulating, soundproof, cheap, light and strong. Adapted to work on standard equipment making brick, hollow blocks, wall tile and concrete lumber. This product has been tested under severe conditions and results can be guaranteed. For full particulars address

The Stowell Laboratory

PORTLAND, INDIANA

STRUCTURAL STEEL ORNAMENTAL IRON

Snead Architectural Iron Works

LOUISVILLE, KY.

Plain or Fabricated Steel for Immediate Shipment.



Write
for
Samples
and
Prices

DUROPLATE BLACKBOARD is used successfully by leading educational institutions everywhere. Each year thousands of square feet are placed in new buildings for permanent use, as well as in Portable Buildings, Sunday School Rooms, Nursery Rooms, and Kindergartens.

See page 2159 Sweet's Catalog.

E. W. A. ROWLES CO.

Manufacturers

2345-2351 So. LaSalle St., CHICAGO, ILL.

Wire Window Guards

Counter Railing	Crilles	Wickets
Skylight Guards	Elevator Enclosures	
Fire Escapes	Iron Stairways	
	Balcony Railings	
Brackets	Builders' Iron Work	

STANDARD IRON & WIRE WORKS

Chattanooga, Tenn.

Brighten your factory walls, dark corridors, basements and sewers with sand-lime brick.

PACE BRICK CO.

Manufacturers

ALBANY,

GEORGIA

Phone 73