Scherpe and Koken.

Iron Works.

St. Louis, Mo.
IN MEMORY OF
HENRY OGDEN AVERY
ARCHITECT
BORN THIRTY-FIRST
JANUARY M. DCCC L II
DIED THIRTIETH APRIL
M. DCCC LXXX
-HIS PARENTS
SAMUEL P. AVERY AND
MARY OGDEN AVERY
HAVE FOUNDED THIS
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OF ARCHITECTURE AND
DECORATIVE ART.
JOHN F. SCHERPE.  ENTERPRISE  WM. T. KOKEN.

Architectural Iron Works & Foundry.

SCHERPE & KOKEN,

South Eighth Street and Park Ave.
St. Louis, Mo.

MANUFACTURERS OF ALL KINDS OF

Plain and Ornamental Cast and Wrought Iron Work

FOR BUILDINGS AND STRUCTURES OF EVERY DESCRIPTION.

Iron Fronts, Columns, Pilasters,
Lintels, Sills, Cornices,
Gratings, Window Guards,
Caps and Sills,
Sash Mullions, Sash Weights,
Front Railings,
Balcony Railings and Brackets,
Cemetery Railings,
Roof Crestings and Finials,
Wrought Iron Fences,
Iron Doors and Shutters,
Fire Escapes,

Bank Vaults and Vault Entrances,
Iron Stable Fixtures and Fittings,
Gratings,
Illuminating Tiles,
Iron Stairs (straight and circular),
Iron Roof Trusses,
Shoes, Rods,
Bolts and Washers,

Girders, Beams,
Flitch Plates, Anchors,
Ventilators,
Corner Guards, &c., &c.

IRON JAIL WORK A SPECIALTY.

ALSO MANUFACTURERS OF

Dale's and Jacob's Celebrated Patent Concrete Illuminating Tile.

Jacob's Patent Wrought Iron Illuminating Doors.

Hyatt's Tile and Jacob's Illuminating Roof Lights.

ESTIMATES PROMPTLY FURNISHED UPON PUBLIC OR PRIVATE WORKS AND BUILDINGS.

PROMPT DELIVERY AND FIRST-CLASS WORK WARRANTED AT LOWEST RATES.

THE FOLLOWING STREET CAR LINES LEAD TO THE WORKS:

6th and Market Street Cars going South,
5th Street Cars going South,
4th Street Cars going South,
Union Depot Cars on Pine St. going West and South.
Entered According to Act of Congress, in the Year 1887, by
SCHERPE & KOKEN,

St. Louis, New York and Chicago,
August Gast Bank Note and Lithographing Company.
1887.
OUR MOTTO.

ALWAYS TO EXCEL.

Always to meet—if possible anticipate, the requirements of the present progressive age.

ADDRESS.

In presenting this, our latest Illustrated Catalogue, 1887 edition, we beg to state that we have spared neither pains nor expense to make it attractive, and at the same time a durable book of reference designed especially for the use of

Architects, Builders and Contractors,

Containing as it does, besides the large number of original designs, representing some of our newest and most popular patterns, much other information pertaining to the Architectural branches; we trust it may be found of frequent practical use and benefit.

Our Foundry, Pattern and Finishing Shops and Forges, as heretofore, are in the hands of the ablest and most skillful mechanics, under the direct supervision of the individual members of the firm; which, with an extensive experience and the aid of all the latest and most approved machinery and appliances, secures to us the most economical and the best practical results obtainable—enabling us to compete successfully with any market, and explains to some extent the flattering success evinced by the growing demand for our work.

Notwithstanding the frequent and important additions to our works made within the last seven years, we found it necessary again to increase our capacity, and having recently purchased a large piece of adjoining property, have just completed additions to our Foundry and the various other buildings, which increases our capacity fully threefold—gives us a floor and ground area of over 50,000 square feet, and makes our establishment now the most complete, and perhaps largest works, of any west of the Allegheny mountains, devoted exclusively to the Architectural Iron branches.

Zealously determined to maintain our pronounced reputation for honorable dealing, for the most rigid compliance with and performance of every requirement of contracts entrusted to us; for prompt delivery and highest standard of excellence as to workmanship and materials at lowest possible prices, we hope to merit a continuance of the good-will and patronage enjoyed heretofore.

Parties desiring to build stores, or use Iron Work of any description, either on public or private improvements, will find it to their interest to consult us before placing their orders.

Any information or suggestions, desired in our line, always cheerfully given.

Correspondence solicited and promptly attended to.

Respectfully,

SCHERPE & KOKEN,

St. Louis, Mo.

All our work is finished with a heavy coat of oil and mineral paint, which prevents corrode or rust, and forms a good priming coat for subsequent painting and ornamentation.
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IRON STORE FRONTS.

The following illustrations represent only some of the Patterns we have on hand, selected for having by their adaptability to the general wants, as well as for their originality and architectural beauty, already gained much popular favor.

We have an endless variety of Patterns on hand, but are by no means limited to them in taking orders. Our pattern shops, like the other departments, are most complete in their arrangement, and keeping a large force of pattern-makers continually employed, we are fully prepared to make new patterns, and can produce work according to original plans, in the shortest possible time.

Where we are not expected to place work in position, as is often the case outside of the city, we would call attention to the fact that all work contracted for by us, is closely jointed and fitted together, as if in position, before leaving our works, and each and every part is so marked that any mechanic can, without trouble, set it in place exactly as required. As an additional precaution against errors or misunderstandings on the part of those setting up work where we are not represented, we send a copy of our working drawings, and a special description with each and every shipment, affording a complete guide for putting the respective parts in place as required.

Parties contemplating to build can therefore send orders for Iron Work without the least hesitancy arising from any fear of not understanding how to place same properly in position.

All requests for quotations should be accompanied by a sketch of ground plan and an approximate list of items, giving sizes, lengths, etc., viz: number and height of stories, thickness of walls, purpose for which building is intended, sizes of openings, designated as door, window or stairway, as the case may be. By giving descriptions and particulars as fully as possible, considerable time is often saved, besides enabling us to quote closest possible prices at once and give more satisfactory information or suggestions, generally.

The dimensions given on the illustrations are intended merely as a guide to show the sizes mostly used. They can be changed to any length, breadth or height that may be desired.
IRON STORE FRONTS.

No. 1.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
One Three-Sided Column, 13 inches by 13 inches by any length.
Two Three-Sided Columns, 10 inches by 13 inches by any length.
Two Round Columns, 10 inches diameter by any length.
Sill Course with Platform, as shown.
Box Lintels, 18 inches by 13 inches by 6 inches, as shown.
Molded Cornice, as shown.
Balcony Guard, as shown.
IRON STORE FRONTS.

No. 2.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Round Corinthian Columns, 6 in. diameter, with Box Pedestal Base, any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Box Lintel, 18 inches by 13 inches by 6 inches, any length.
Modillion Cornice, any length, with two Stop Blocks, as shown.
Grilles, under Show Windows, any length.
IRON STORE FRONTS.

No. 3.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Pilasters, 13 inches by 13 inches by any length.
Two Intermediate Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Box Lintel, 18 inches by 13 inches by 6 inches, any length.
Modillion Cornice, as shown, any length.
IRON STORE FRONTS.

No. 6.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Three-Sided Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6 inch-riser, any length.
Lintel Plates, 13 inches wide, any length.
IRON STORE FRONTS.

No. 7.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Three-Sided Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6 inch riser, any length.
Box Lintel, 18 inches by 13 inches by 6 inches, any length.
Modillion Cornice, as shown, any length, with Stop Blocks.
Grilles, under Show Windows, any length.
IRON STORE FRONTS.

No. 10.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Intermediate Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6 inch-riser, any length.
Box Lintel, 18 inches by 13 inches by 6 inches, any length.
Modillion Cornice, as shown, any length.
IRON STORE FRONTS.

No. 11.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Pilasters, 13 inches by 13 inches by any length.
Two Intermediate Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Lintel Plate, 13 inches wide, any length.
No. 14.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Three-Sided Columns, 6 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6-inch riser.
Box Girder, 18 inches by 13 inches by 6 inches.
Molded Cornice, with Stop Blocks, as shown.
IRON STORE FRONTS.

No. 15.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 8 inches by any length.
Two Three-Quarter Round Columns, 8 inches diameter by any length.
Two Round Columns, 6 inches diameter by any length.
Box Girder, 18 inches by 13 inches by 6 inches, any length.
Molded Cornice, with Stop Blocks, as shown.
Grilles, under Show Windows, any length.
No. 18.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
One Tension Rod Girder, 13 inches wide, any length.
Grilles, under Show Windows, any length.
IRON STORE FRONTS.

No. 22.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches, by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Tension Rod Girder, 13 inches wide, any length.
Grilles, under Show Windows, any length.
IRON STORE FRONTS.

No. 23.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Pilasters, 13 inches face and 4 inches Reveal Plate, any length.
Two Columns, 8 inches by 10 inches by any length, with Spandrels.
Two Half Columns, 4 inches by 10 inches by any length, with Spandrels.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Box Girders, 18 inches by 13 inches by 6 inches, any length.
Modillion Cornice, with Stop Blocks, as shown.
Grilles, with Cap and Base Moldings under Show Windows, any length.
No. 25.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches, any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Tension Rod Girder, any length up to 30 feet.
Grilles under Show Windows, any length.
This front can be changed any time without shoring up the wall above.
IRON STORE FRONTS.

No. 26.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches, any length.
Two Round Grecian Fluted Columns, 6 inches diameter by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Box Girder, 18 inches by 13 inches by 6 inches.
Cornice any length, with Two Stop Blocks.
IRON STORE FRONTS.

No 27.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Round Roped Columns, 6 inches diameter by any length.
Sill Course, 15 inches wide, with 6 inch riser, any length.
Lintel Plates, 13 inches wide, any length.
25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches by any length.
Two Three-Sided Columns, 6 inches by 13 inches by any length.
One Round Column, 6 inches diameter by any length.
Sill Course, 15 inches wide, with 6-inch riser, any length.
Box Girders, 18 inches by 13 inches by 6 inches, any length.
Cornice any length.
IRON STORE FRONTS.

No. 29.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Pilasters, 13 inches by 13 inches by any length.  
Two Intermediate Columns, 6 inches by 13 inches, by any length.  
Sill Course, 15 inches wide, with 6 inch riser, any length.  
Box Lintel, 18 inches by 13 inches by 6 inches, any length.  
Modillion Cornice, any length, with Two Stop Blocks.  
Grilles under Show Windows any length.
No. 30.

25 FEET WIDE WITH FIRST STORY 14 FEET AND SECOND STORY 12 FEET IN CLEAR.

Consists of

- 2 Pilasters, 13 in. by 9 in., any length, in both stories.
- 3 Columns, 6 in. by 9 in., any length, in first story.
- 3 Columns, 6 in. diameter, any length, in second story.
- Box Girder, 18 in. by 9 in. by 6 in., any length, first story.

- Modillion Cornice, with Stop Blocks, first story.
- Sill Course, 12 in. wide, with 6-inch riser, any length, first story.
- Sill Course, 12 in. wide, with 6-inch riser, any length, second story.
- Lintel Plates, 9 inches wide, any length, top of second story.
- Grilles under Show Windows, any length.
Consists of

Two Pilasters, 13 inches by 9 inches, any length, in both stories.
Two Columns, 6 inches by 6 inches, with round upper shaft, any length, in first story.
Two Columns, the same in second story.
Box Girders, 15 inches by 9 inches by 6 in., any length, first story.

Cornice, with Brackets over first story.
Sill Course, 12 inches wide, with 6-inch riser, any length, with
Vestilale Plates 3 feet wide, any length.
Sill Course, 12 inches wide, with 6-inch riser, any length, 2d story.
Lintel Plates, 9 inches wide, any length, top of second story.
Grilles under Show Windows, any length.
No. 34.
25 FT. WIDE.  FIRST STORY 14 FT. AND SECOND STORY 12 FT. IN CLEAR.
Consists of
Two Pilasters, 13 inches by 9 inches, any length, in both stories.
Two Columns, 6 inches by 9 inches, any length, in first story.
Two Columns, the same, any length, in second story.
Box Girder, 18 inches by 9 inches by 6 in., any length, first story.
Corner, with Stop Blocks, first story.
Sill Course, 12 inches wide, with 6-in. riser, any length, first story.
Sill Course, 12 inches wide, with 6-in. riser, any length, 2d story.
Lintel Plates, 9 inches wide, any length, top of 2d story.
No. 35.

25 FEET WIDE, FIRST STORY 14, AND SECOND STORY 12 FEET IN CLEAR.

Consists of

Cornice, first story.
Sill Course, 12 inches wide, with 6-in. riser, any length, first story.
Sill Course, 12 inches wide, with 6-in. riser, any length, 2d story.
Lintel Plates, 9 inches wide, any length, top of second story.
Grilles under Show Windows, any length.

Two Pilasters, 13 inches by 9 inches, any length, in both stories.
Two Columns, 6 inches by 6 inches, any length, in first story.
Two Columns, the same, any length, in second story.
Box Girdler, 18 inches by 9 inches by 6 in., any length, first story.
No. 32.

Can be made any Height and Width.

25 FEET WIDE. FIRST STORY 19 FEET 6 INCHES; SECOND STORY 17 FEET 6 INCHES; THIRD STORY 16 FEET 6 INCHES CLEAR.

Consists of

Pilasters 18 inches by 18 inches, with Reveal Plate, three stories high, any length.
Two round and two half-round Columns, 10 inches diameter first story, any length.
Two round and two half-round Columns, 8 inches diameter second story and the same in third story, any length.
Sill Course, 24 inches wide, with 6-inch riser, any length.
Three Spandrels with soffits in each story.
Grilles under Show Windows, any length.
Box Girders, 24 inches by 18 inches by 6 inches, over first and second stories, any length.
Frieze Molding over first and second stories.
Cornice with wide top plate over first and second stories.
Lintel Plates 18 inches wide over third story, any length.
No. 36.

25 feet wide. First story 16 feet 6 inches; second story 14 feet 6 inches; third story 13 feet 6 inches in the clear. Consists of

Pilasters 13 inches by 13 inches, three stories high, any length.
Two round and two half-round Columns, 8 inches diameter first story, any length.
Two round and two half-round Columns, 6 inches diameter second story and same in third.
Sill Course 13 inches wide, with 6-inch riser, first story.

Can be made any Height and Width.

Two Grilles under Show Windows, any length.
Box Girders, 18 inches by 13 inches by 6 inches over first and second stories, any length.
Frieze Molding over first and second stories, any length.
Cornice with two Stop Blocks over first and second stories.
IRON COLUMNS, PILASTERS, ETC.,

PLAIN AND ORNAMENTAL.

Our Stock of Column and Pilaster Patterns embraces an endless variety of beautiful and artistic designs, round, square and angular shaped, viz.: Corinthian Fluted, Grecian Fluted, Panel, Rope, Composite and Fancy Styles.

The illustrations on pages 28 to 36 represent some of the most recent and popular styles in stock, to which new ones are being continually added.

We can make CASTINGS from THESE PATTERNS on VERY SHORT NOTICE and are especially well equipped for GETTING OUT NEW PATTERNS after any drawings or designs that may be furnished.

CAPITALS ON PAGE 30.

No. 1, Corinthian Capitals for Pilasters, any Diameter from 6 to 12 inches.
No. 2, Composite Capitals, any Diameter.
No. 3, Ionic Capitals any Diameter.

TABLES OF STRENGTH OF CAST IRON COLUMNS, PAGE 95.
No. 1.
No. 2.
No. 3.

See page 29.
Tables of Strength of Cast Iron Columns, Page 95.

No. 105 A.
Any diameter, 4 inches and larger. Any length. Showing connection between two columns, one on top of the other.

No. 104.
Any diameter, 4 inches and larger. Any length. Foot Plates two diameters square.

No. 105 B.
Showing another connection between two columns.

No. 106.
Any diameter, 4 inches and larger. Any length.

No. 101.
Any diameter, 4 in. and larger

No. 103.
Any diameter, 4 in. and larger

Any length.
No. 117.
5 inch face,
Sides any depth.
Any length.

No. 118.
13 inch face,
Sides any depth.
Any length.

No. 119.
21 inch face,
Sides any depth.
Any length.

No. 120.
9 inch face,
Sides any depth.
Any length.

No. 121.
13 inch face,
Sides any depth.
Any length.

No. 122.
6 inch face,
Sides any depth.
Any length.

No. 123.
12 and 16 in. face.
Sides any depth.
Any length.

No. 124.
6, 7 and 8 in. face.
Sides any depth.
Any length.

No. 125.
13 and 18 in. face.
Sides any depth.
Any length.

No. 126.
6 inch face.
Sides any depth.
Any length.
AWNING FRAMES.

For Canvas, Sheet Iron or Corrugated Iron Covers.

**AWNING FRAME No. 1.**

25 feet front, 12 feet projection.

Three Columns, 4 inch diameter by 11 feet (stand about 12 feet apart).
Four Corner Brackets, No. 1, 15x21 inches.
Twenty-five feet Lattice Facia, 12 inches high.
Five Rafters, 2x2 inch, T iron.

Made any size to suit.
TENSION ROD GIRDERS.

Made 9, 13 and 18 inches wide. Any length.

LINTEL PLATES.

Made any Size. With or without Skewbacks.

DOOR SILLS.

Made any Size. With or without Risers.
WROUGHT IRON GIRDERS AND BEAMS.

WROUGHT IRON ROOF TRUSSES. ANY SPAN.

No. 1.
WROUGHT IRON BOX GIRDER.
Any Size.

No. 2.
WROUGHT IRON LATTICE GIRDERS.
Any Size.

No. 3.
COMPOUND GIRDERS OF BEAMS.
Any Size—See page 96.

No. 4.
WROUGHT IRON BEAMS.
Any Size—See page 96.

Tables of Strength, Page 96.
IRON STAIRS AND STAIR RAILINGS.

The illustrations on the following pages represent Straight and Circular Stair-ways, for interior and exterior purposes, which, for ornamental appearance, durability and safety in case of fire, are much in favor.

Parties ordering will please state the exact Style and Size wanted. Estimates promptly furnished on application.

WROUGHT RAILING No. 80.

2 feet, 9 inches high.
STAIRS

No.

3.

Can he made any size.

STAIRS NO. 3.
STAIRS No. 10.
For Indoors.

Consists of
- Newel Post No. 28, 4 feet 9 inches high.
- Wrought Iron Railing No. 82, prepared for Wood Hand Rail.
- Cast Iron Carriages, Treads and Risers.
  Can be made any size.

STAIRS No. 11.
For front of second story Bank Vault.

Consists of
- Supporting Brackets No. 1.
- Cast Iron Posts No. 18, 3 feet 3 inches high.
- Wrought and Cast Railing No. 81, 2 ft. 9 inches high.
- Cast Carriages, Treads, Risers and Platform.
  Can be made any size and shape.
IRON STAIRS.

**STAIRS No. 4.**

6 feet Diameter. Can be made any Height or Diameter.

Consists of

Iron Column and Treads with Risers.
Railing No. 27, 2 feet 6 inches high.

**STAIRS No. 5.**

5 ft. 6 in. Diam. Can be made any size.

Consists of

Railing No. 40, 2 feet 9 inches high.
Post No. 4, 3 feet 8 inches high.
Iron Column and Treads with Risers.
IRON STAIRS.

STAIRS No. 6.
Any Size.
Consists of
3 Carriages.
Railing No. 25, 2 feet 8 inches high.
Post No. 2, 2 feet 8 inches high.
Either Iron or Wood Treads, Platform and Risers.

STAIRS No. 7.
Any Size.
Consists of
3 Carriages.
Railing No. 37, 2 feet 8 inches high.
Post No. 2, 2 feet 8 inches high.
Either Iron or Wood Treads, Platform and Risers.
IRON STAIRS.

STAIRS No. 8.
Consists of
Balusters, No. 66. Newel Post, No. 6, 3 feet 8 inches high. Hand Rail.

STAIRS No. 9.
Any Size. Consists of
Cast Iron Treads, Risers and Platform. Two Columns, 3 inches diameter.
Three Carriages. Two Posts, No. 18. One Post, No. 19.
Two Gas Pipe Rails, with Collars.
One Intermediate Post, No. 24.
FIRE ESCAPES OF ALL KINDS.

Made in Sizes and Shapes to suit premises.
WINDOW CAPS.

No. 1.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 2.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 5.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

ENTERPRISE ARCHITECTURAL IRON WORKS.
WINDOW CAPS.

No. 8.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 9.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 6.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 7.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "
WINDOW SILLS.

No. 1.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 2.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 3.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 5.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 7.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "

No. 6.
Sizes Between Brick Jambs.
3 feet 1 inch. 3 feet 5 inches.
3 " 3 inches. 3 " 7 "
IRON VAULT LINING AND ENTRANCE DOOR.

Can be made any Style, Size and Shape.

IRON JAIL AND PRISON WORK OF EVERY DESCRIPTION A SPECIALTY.

Estimates furnished promptly on application.
IRON VAULT ENTRANCES.

Door 2 ft. 6 in. by 6 ft. 6 in. Jambs 20 in.
Can be made any Size.

IRON SHUTTERS AND DOORS.

Every Description and Size.

Shutter Hinge Eyes, for Building in Brick Walls.
No. 1.
Corner Guards.
4 x 4 inches. 3 ½ x 3 ½ in.
4 feet high. 3 ft. 6 in. high.
Made any Size to order.

No. 2.

No. 3.
Wagon Wheel Guard.
3 ft. high. For 9, 13 and 18 in. walls.

No. 4.

Down Spout Guards.
3, 4 and 5 inch inside diameter.
4, 5 and 6 feet long.

No. 1.
Drip Pan.
13 inches by 21 inches.

No. 2.

Coal Vault Covers.
Perforated, Solid and Illuminated.

Coal Vault Rings.
No. 1, 18 in. diameter by 13 in. deep.
No. 2, 24 in. diameter by 18 in. deep.
Can be changed to any Depth.

Drain Grates
Of all kinds in Stock, and
Made to Order.
No. 1.
15, 18 and 24 inches long. Any size made to order.

No. 2.
15, 18 and 24 inches long. Any size made to order.

No. 3.
18, 24 and 30 inches long. Any size made to order.

No. 4.
7, 8, 9, 11 and 14 inches diam.
3 feet 4 inches long by 1 foot 11 inches wide.

No. 5.
32 x 16.

No. 6.
5 x 10, 7 x 12, 8 x 12, 9 x 12, 9 1/2 x 17, 15 x 24.

No. 7.
24 x 14.

No. 8.
38 x 11.

No. 9.
14 1/2 x 8 1/2.

No. 10.
16 in. diam.

No. 11.
16 in. diam.

No. 12.
9 in. diam.

Ventilators.
No. 1, 5 in. by 8 1/2 in.
No. 2, 5 1/4 in. by 10 3/8 in.
No. 3, 7 1/4 in. by 22 1/4 in.
No. 4, 9 1/2 in. by 19 1/4 in.
No. 5, 9 1/2 in. by 13 1/2 in.
No. 6, 5 in. by 14 1/2 in.
No. 7, 5 in. by 18 1/2 in.
No. 8, 7 3/8 in. by 7 3/8 in.
No. 9, 7 3/8 in. by 15 in.
No. 10, 7 in. by 9 in.
No. 11, 12 in. by 24 in.
No. 12, 9 in. by 24 in.
No. 13, 9 in. by 12 inches.

Step Plates.
Heel, 2 inches wide, any length.
Nosing, 2 1/2 inches wide, any length.
No. 1.

Park Settee.

6 feet long, 2 legs. 8 feet long, 3 legs. 10 feet long, 3 legs.

Wrought Area Grates.

Made any size.

Tree Boxes.

13 in. diameter at center. 5 feet high.

Street Lamp Posts.

Can be used for gas, gasoline or coal oil lamps.

Institution Bedsteads.

2 feet 4 inches by 5 feet 6 inches.
2 feet 8 inches by 6 feet 2 inches.
Double, 4 feet by 6 feet 4 inches.
Corner Hay Rack.
3 ft. 2 in. high. 2 ft. 2 in. projection.

Flue Rings.
6, 7 and 8 inches diameter.

Foot Rail Brackets.

Hand Rail Brackets.

Stable Bell Trap and Gutter.

Ash Chute Doors.
15 inches by 15 inches.

Ash Flue Doors.
10 inches by 12 inches.
12 inches by 12 inches.
16 inches by 16 inches.

Corner Oat Troughs.
18 in. by 18 in. by 12 in. deep.
No. 1.  
Cast Iron Stall Guard.  
8 feet by 2 feet 6 inches.

No. 2.  
Wrought Iron Stall Guard.  
2 feet 6 inches by 7 feet. Made any size.

No. 3.  
Cast Iron Stall Guard.  
5 feet 6 inches by 2 feet 4 inches.

No. 5.  
Wrought Iron Stall Guards.  
2 feet 6 inches by 7 feet. Made any size.
Wrought and Cast Iron Stall Guard, No. 4.

2 feet 2 inches by 8 feet 4 inches.
Stall post No. 1, 3½ inches diameter by 6 feet 6 inches high.


1 foot 8 inches wide. Adjustable to any length from 4 feet 6 inches to 4 feet 10 inches.
WINDOW GUARDS AND GRILLES.

No. 4.
2 feet high. 3 feet wide. Any size.

No. 5.
Wrought and Cast Window Guard.
2 feet by 3 feet. Any size.

No. 6.
Any size.

No. 9.
Cast Grille.
18 inches high. Any length.

No. 7.
Wrought and Cast Window Guard.
2 feet by 3 feet. Any size.

No. 8.
Cast Grille.
15 inches high. Any length.
WINDOW GUARDS AND GRILLES.

No. 22.
Wrought Iron Grille.
Made any size.

No. 6.
Wrought Iron Window Guard.
2 feet 6 inches by 2 feet. Any size.

No. 3.
Wire Guard.
Any size.

No. 23.
Wrought Iron Grille.
Made any size.

No. 1.
Cast Iron Window Guard.
3 feet to 3 feet 6 inches wide.

No. 2.
Crimped Wire Guard.
Any size.

Special Guards, either of Wrought or Cast Iron made after any design furnished.
Verandah No. 2.

Railing No. 13, see page 69. Cresting No. 123, see p. 87. Finials No. 8, see p. 91. Corner Brackets No. 3. Columns 4 in. diam.
Verandah No. 1.

Railing No. 8, see page 69. Post No. 17. Corner Brackets No. 1. Columns 3 inches diameter.

Give height from floor to floor, also length and width on frieze.
Light Wrought Gate, No. 6. Made any size.

Wrought and Cast Iron Gate, No. 7.
Made any size.

Wrought Iron Gate, No. 8.
Wrought Iron Railing, No. 70, 3 feet 6 inches high.
Cast Iron Posts, No. 25, 3 feet 8 inches high.
Made any size.
Carriage Gate No. 3.
10 feet wide. 6 feet high at Posts. Can be made any size.

Railing No. 10.
6 feet high. Post No. 14, 7 feet 6 inches high.

Gate No. 2.
4 feet high. 3 feet wide.
Post No. 5, 4 feet 6 inches high.

Railing No. 49.
3 feet 6 inches high.
GATES.

No. 1.

5 feet wide. Can be made any height.

No. 4.

4 feet 6 in. wide. 5 feet 8 in. high. Post No. 3, 4 feet 3 in. high; can be made any height.
BALCONY BRACKETS.

No. 1.
3 feet by 12¼ inches.
Made for any thickness of wall.

No. 2.
3 feet by 11½ inches.
Made for any thickness of wall.

No. 3.
3 feet by 10½ inches.
Made for any thickness of wall.

No. 4.
3 feet by 10 inches.
Made for any thickness of wall.
BALCONY BRACKETS.

No. 5.
4 feet 3 inches by 2 feet 1 inch. Made for any thickness of wall.

AWNING BRACKET.

No. 6.
Bracket for Awning over sidewalk.
Ornamental part 5 feet projection by 3 feet deep. Top bar of size to suit the projection required.
BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.

No. 3.
2 feet 3 1/4 inches high.

No. 6.
2 feet 6 inches high.

No. 8.
2 feet 5 3/4 inches high.

No. 11.
2 feet 9 inches high.

No. 13.
2 feet 8 1/2 inches high.
BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.

No. 64.
1 foot 2 1/2 inches high. For Music Halls or Theatres.

No. 26.
2 feet 10 inches high.

No. 71.
2 feet 7 inches high.
BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.

No. 21.
2 feet 10 inches high.

No. 9.
2 feet 7 1/2 inches high.
Without Upper Scroll, 2 feet 4 inches.

No. 23.
2 feet 10 inches high.

No. 5.
2 feet 8 1/2 inches high.
BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.

No. 14.
2 feet 10 inches high.

No. 18.
2 feet 11 inches high.

No. 20.
2 feet 6 3/4 inches high.

No. 19.
2 feet 10 inches high.
BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.

No. 15.
2 feet 10 inches high.

No. 16.
2 feet 4½ inches high.

No. 73.
Wrought and Cast. 2 feet 6 inches high.

No. 69.
2 feet 11 inches high.
RAILINGS.

No. 47.
3 feet 6 inches high.
Can be made any size.
Post No. 1, 5 feet 5 inches high.

No. 41.
3 feet 6 inches high.
Can be made any height.

No. 31.
3 feet high.
Can be made any height.

No. 29.
3 feet high.
Can be made any height.
RAILINGS.

No. 25.
2 feet 8 inches high.
Can be made any size.
Post No. 2, 2 feet 8 inches high.

No. 38.
3 feet 6 inches high.
Can be made any height.

No. 43.
3 feet 6 inches high.
Can be made any height.

No. 46.
3 feet high.
Can be made any height.
RAILINGS.

No. 34.
3 feet high.
Can be made any height.

No. 36.
3 feet high.
Can be made any height.

No. 33.
3 feet high.
Can be made any height.

No. 30.
3 feet high.
Can be made any height.
RAILINGS.

No. 74.
Cast and Wrought.
2 feet 6 inches high.

No. 16.
2 feet 9 inches high.
Post No. 16, 3 feet 7 inches high.

No. 75.
All Wrought Iron.
3 feet 6 inches high.

No. 76.
All Wrought Iron.
3 feet 6 inches high.
RAILINGS.

No. 77.
All Wrought Iron.
3 feet 6 inches high.

No. 78.
All Wrought Iron.
3 feet 6 inches high.

No. 79.
1 foot 10 inches high.
Post No. 27, 2 feet 2 inches high.
RAILINGS.

No. 53.
2 feet high.

No. 56.
2 feet high.

No. 2.
3 feet 4 inches high.

No. 12.
3 feet 6 inches high.
Post No. 8, 3 feet 10 inches high.
RAILINGS.

Cemetery Cross.
4 feet high.
With or without lettering.

No. 41.
Any size.

No. 55.
3 feet 2 inches high. Any size.

No. 7.
3 feet high.

No. 54.
3 feet 4 inches high. Any size.
RAILINGS.

No. 50.
1 foot high. Post No. 13, 1 foot 6 inches high.

No. 4.
3 feet high.

No. 17.
2 feet 10 inches high.

No. 20.
3 feet 4 inches high.

No. 22.
3 feet 2 inches high.
RAILINGS.

No. 51.
1 foot 7 inches high. Post No. 12, 2 feet 6 inches high.

No. 68.
1 foot 7 inches high. Post No. 15, 2 feet 2 inches high.

No. 52.
2 feet high.
RAILING POSTS.

No. 6.
4 feet 2½ inches high.

No. 20.
2½ inches diameter by 3 feet 4 inches high.

No. 9.
3 feet 6 inches high.

No. 16.
3 feet 6 inches high.

No. 3.
4 feet 3 inches high.

No. 2.
3 feet 2 inches high.

No. 18.
3 feet 3 inches high.

No. 19.
3 feet 5½ inches high.
RAILING POSTS.

No. 21.
3 feet 3 1/2 inches high.

No. 10.
1 foot 10 inches high.

No. 15.
2 feet 2 inches high.

No. 23.
8 in. by 8 in. by 3 ft. 9 1/2 in.

No. 25.
3 feet 6 inches high.

No. 22.
5 in. by 3 1/2 in. by 4 ft. 4 1/2 in.

No. 26.
3 feet 4 inches high.

No. 7.
3 feet 3 inches high.
ROOF CRESTINGS AND FINIALS.

No. 101.
2 feet 2 inches high.

Parties ordering Roof Crestings will please give measurements on Frieze of Cornices.

No. 116.
Cresting 3 feet 5 inches high.
Finial No. 13, 4 feet 6 inches high.

No. 124.
2 feet 5 inches high.
Finial No. 1, 4 feet 10 inches high.
ROOF CRESTINGS AND FINIALS.

No. 101.
2 feet 2 inches high.

No. 127.
1 foot high.

No. 109.
1 foot 3½ inches high.

No. 105.
1 foot 1½ inches high.

No. 125.
2 feet 2 inches high.

No. 113.
1 foot 8½ inches high.

No. 120.
2 feet 2½ inches high.
ROOF CRESTINGS AND FINIALS.

No. 117.
2 feet high.

No. 123.
1 foot 6¾ inches high.

No. 102.
Cresting 2 feet high. Finial No. 10.

No. 107.
2 feet 6 inches high.
ROOF CRESTINGS AND FINIALS.

No. 122.
1 foot 10½ inches high.

No. 114.
1 foot 10 inches high.

No. 128.
2 feet 4 inches high.

No. 110.
2 feet 11½ inches high.

No. 115.
1 foot 7½ inches high.

No. 121.
1 foot 9 inches high.
ROOF CRESTINGS AND FINIALS.

No. 126.  
3 feet high.

No. 111.  
2 feet 4½ inches high.

No. 104.  
Cresting 1 foot 10 inches high.  
Finial No. 14, 2 feet 10½ inches high.

No. 119.  
2 feet 2 inches high.
ROOF CRESTINGS AND FINIALS.

No. 129.
1 foot 6 inches high.

No. 130.
1 foot 7 inches high.

No. 131.
1 foot 8 inches high.

No. 132.
1 foot 6 inches high.
FINIALS FOR ROOF CRESTINGS.

No. 18.
2 feet 3½ in.
high.

No. 8.
2 feet 10 in.
high.

No. 4.
2 feet 7 in.
high.

No. 3.
2 feet 4 in.
high.

No. 6.
3 feet high.

No. 10.
3 feet high.

Finials Nos. 3, 4, 6, 8 and 10 can be used with Crestings Nos. 105, 109, 113, 115, 123, 127, 128, 129, 130, 131 and 132.

Finials Nos. 10 and 16 with Crestings Nos. 101 and 125.

Finials Nos. 5, 11 and 12 with Crestings Nos. 102, 104, 107, 111, 114, 117, 119, 120, 121, 122 and 128.

Finial No. 18 with Cresting No. 126.

Finial No. 1 with Cresting No. 124.

Finial No. 18 with Railings Nos. 52, 53 and 56.
FINIALS FOR ROOF CRESTINGS.

No. 12.
4 feet 3 in. high.

No. 5.
4 feet 1/2 inch high.

No. 17.
4 feet 10 in. high.

No. 11.
3 feet 10 in. high.

No. 16.
3 feet 10 in. high.
ILLUMINATING TILES OF ALL KINDS,
For Areas, Skylights, Roofs, Floors, Sidewalks, Etc.

PATENT CONCRETE TILE,
For Sidewalks and Areas.
Lenses, 7/8 inch thick, 2 inches diameter.

Sole Licensees and Manufacturers for the States of Missouri, Iowa, Kansas and Nebraska, of the Celebrated
Patent Concrete Illuminating Tiles.

As sole Licensees of the various kinds of the Celebrated Patent Concrete Illuminating Tile, we take pleasure in calling attention to its merits over all other makes, for its smooth, non-slippery surface, superior illuminating qualities, cleanliness and beauty of appearance, superior strength, durability, etc.

It is preferred to any other kind wherever it has been introduced.

Prices and estimates furnished on application.
All orders will receive prompt attention.

Jacob's Detachable Ring Concrete Illuminating Tile.
Patented Aug. 31, 1880.

Lens 7/8 inch thick, 2 inches diameter.

The Glass is set with Brimstone or other Plastic Cement into a brass or copper ring, after which the glasses and rings are inserted into the Concrete Tile. This method, covered by Patent, protects the glasses against action of the weather, effectively preventing them from chipping or breaking from natural causes.
FOR TABLES OF STRENGTH OF WROUGHT IRON BEAMS SEE PAGE 96.

Jacob's Patent Wrought Iron Illuminating Door and Roofing Plate.

For Doors to cover Sidewalks, Elevators, Areas, Steps and Hatchways; for Fire and Burglar Proof Illuminating Window Shutters; also, for Illuminating Roofs. Is unexcelled for lightness, strength and durability.

Is much lighter to handle than the Cast-Iron Illuminating Doors, and, unlike them, can not be broken by the roughest usage.
TABLES OF STRENGTH OF CAST IRON COLUMNS.

Based upon "Gordon's Rules."

The weights are given in tons of 2,000 pounds avoirdupois, which can be borne with safety when the ends of columns are dressed or turned at right angles to their axis. The ends of all our columns are turned and trued on lathes.

### 1/2 INCH METAL.

**DIAMETER IN INCHES.**

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As given by "Union Iron Mills."

The weight is given in tons of 2,000 pounds avoirdupois, and is supposed to be equally distributed over the whole Beam.

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<tr>
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<tr>
<td>Spruce</td>
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Green Timber One-Half Heavier Than Dry.