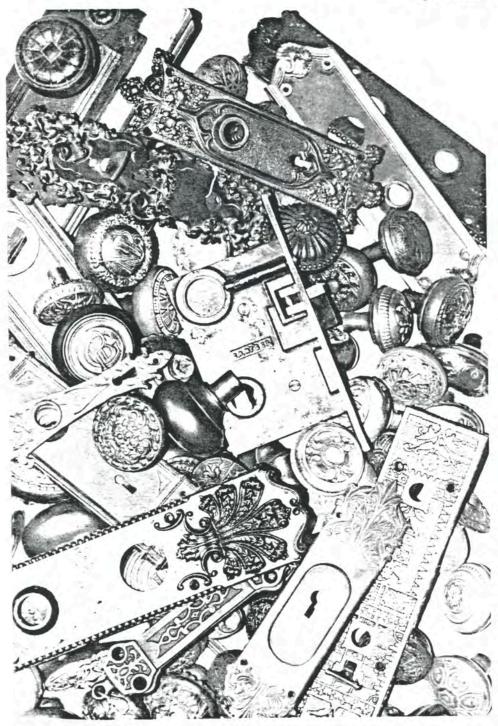
of

# The Iron Age in Hardware

by Maud Eastwood



ANTIQUE DOORKNOB COLLECTORS OF AMERICA EDUCATIONAL HANDOUT 1997 CONVENTION KING OF PRUSSIA, PENNSYLVANIA

Cover Photo: Loretta Nemec Layout, Design & Edited: Loretta Nemec Naperville, Illinois

#### **FOREWORD**

The content of this treatise is a limited account of the Iron Age in Builders' Hardware, the theme chosen for the 1997 convention of the **Antique Doorknob Collectors of America**. Though a limited account, references will be made to hardware of other metals when doing so will serve to add interest or clarify points made.

The Author

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NOTE: Consult recent issues Numbers 80, 81, 82, and 84 of The Doorknob Collector for lead-in and additional material to increase the effectiveness of this illustrated addition to the theme of this convention, "Iron Age in Hardware".

No. 80 - Background of Iron Door Hardware in America

No. 81 - Iron Age Builders' Hardware

No. 82 - Iron Age Builders' Hardware through the 1950s

No. 84 - Kahala Bronze, A Russell & Erwin Hardware Finish

Importantly - Ordering catalog copies through the Antique Doorknob Collectors of America archives provides a prime source of research material.

#### Section I

#### COLONIAL AMERICA'S IRON DOOR HARDWARE

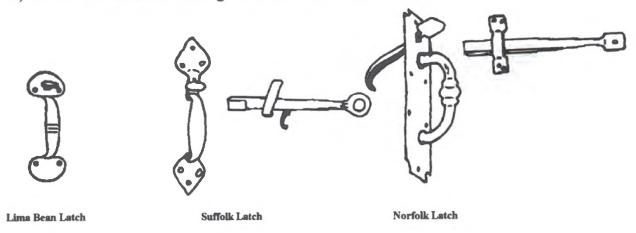
Thumb Latches, Lift Latches, and drop Latches were the various names given early American wrought iron door hardware in Colonial America.

The simplest thumb latch forged from bar iron was comprised of a hand grasp, lift, bar, staple, and catch.

Many of the latches were made in America, but ports of entry were destination for imported European "iron-mongery" that supplied the larger share that included bolts, hasps, latches, locks, etc.

"Lima Bean" latches were exported to the colonies in great quantity. They were inexpensive. These were of the Suffolk variety, a handle with a cusp on each end.

Norfolk latches followed by 1820 and were characterized by a handle attached to a full plate. By the 1830s, inventive minds were visioning door hardware of different forms.



#### THUMB LATCH TO MORTISE LOCK PROGRESSION

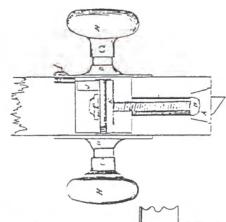
Patent Office records of the 1800s are useful in charting these innovations and improvements in door hardware that led from the thumb latch to the conventional mortised lock. Unfortunately, many patent records were destroyed in part or full by fire. Not all patent records were possible to replace.

However, through the following sketches taken from existing patent records and given in chronological order, a picture may be gained to study the line of progression. Wrought or cast iron was a factor in each of these cases.

# P., E. W., & J. A. Blake Patented Latch, Date, December 31, 1833

The innovative Blake Brothers' 1833 Escutcheon Latch was ahead of its time in principles involved, but never-theless enjoyed a measure of success. The "bore-in" installation feature was not fully developed for wide use for another hundred years.

Escutcheon latch knobs of glass, metal and wood have been found. Several of the distinctive short-shanked knobs and a specimen of a full latch assembly survived to appear at ADCA conventions.



# Harlow Isbell, Door Handle, November 8, 1834

Harlow Isbell's 1834 Norfolk-type latch backplate of strip iron utilized iron rods to affix the horizontal hand grasp. When produced by this process, much hand work at the forge would be eliminated.

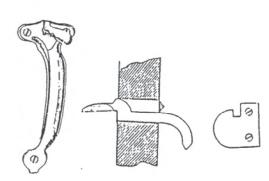
Examples of this patented "Door Handle" equipped with pewter plated handles have been recorded on existing dwellings in the New Hampshire area. Corbin reproduced this latch after the turn of the century.

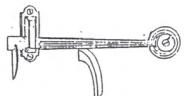
# America's First Patented Mortise Lock (Reported in a "firsts" book)

In 1835 Philo and Eli Whitney Blake of Blake Brothers, Westville, Connecticut introduced the mortise door lock in America.

# Blake Latch patented July 21, 1840, Patent No. 1,704

In 1840, the Blake brothers again obtained a patent of significant impact on thumb latch production—a cast iron latch. This invention hastened the decline of the distinctive hand forged latch.





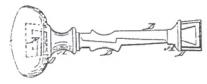
#### Livingston, Roggen, Adams, and Phillips, Knob, No. 4,883 Patented December 10th, 1846

The combined talents of three Pittsburgh iron founders and two glass manufacturers resulted in a patent for uniting a glass knob head to a cast iron collar and neck by means of projections extending into a glass head in a state of fusion. The patent full title, "Attaching Door-Knobs to their collars".

Livingston, Reggen, Adams & Phillips,

Knob,

794,883, Patented Dec.10,1846.



Knob Attachment, J. A. Crever, No. 6,800. Patented October 16th, 1849

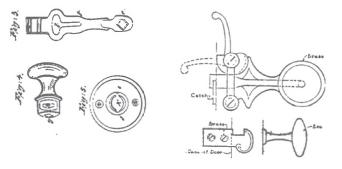
J. A. Crever of Pittsburgh, in 1849, developed and patented a method of attaching knobs to doors to activate a latch in place of a thumb press. The knobs were used in conjunction with a Roggen type drop latch plate that operated without a knob. Latches of this type were used extensively at Amana Colonies.



J. A. Crever. Knob Attachment

No. 6,800. Patented Oct. 16, 1849

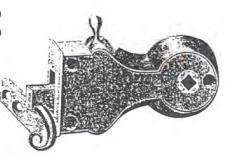




This likeness of a Crever type knob latch was taken from drawing made by the Historic American Building Survey at an early New Hampshire site.



"Hamlet" Lift Latch, all iron, with a stop was offered by Russell & Erwin in 1865. This fully encased Horizontal Rim Knob Latch appears to be related to the Crever patent, but also is pictured with the exact catch of the Roggen Drop Thumb latch.

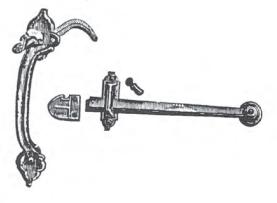


Hamlet, Stop, Lift Latch, all Iron, Japanned, Right or Left Hand

#### Roggin's Drop for Thumb Latches (Pittsburgh Pattern)

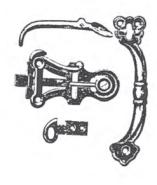
(Patent records spell the name, "Roggen," with a "e" unlike the spelling in dealers catalogs of "Roggin's.")

The Roggin Drop Thumb Latch, shown in Russell & Erwin's 1865 catalog and in the 1873 Walsh, Coulter, and Flagler sales book of American and Foreign Hardware, carried the treatment of the 1840 Blake Latch a step further by combining the pivot of the latch bar and the staple guide to a door or door plate.



Keystone Hardware Manufacturing Company Blake Pattern Thumb Latch, 1876

Roggins' Drop Thumb



Pittsburgh Pattern thumb Latch with Roggen's Drop

Front Door.

The distinguishing difference between the Blake and the Roggen latches, as will be noted, is in the treatment of the latch bar. Blake's bar is attached to the door and Roggen's to a plate that is attached to the door.



Empire Case

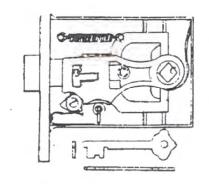
Roggen's latches, Plain and Cased, illustrated in the 1865 Russell & Erwin catalog.

National Case

#### Combined Knob-Latch and Lock, John H. Vickers, Patent No. 93,504 Dated August 10th, 1869

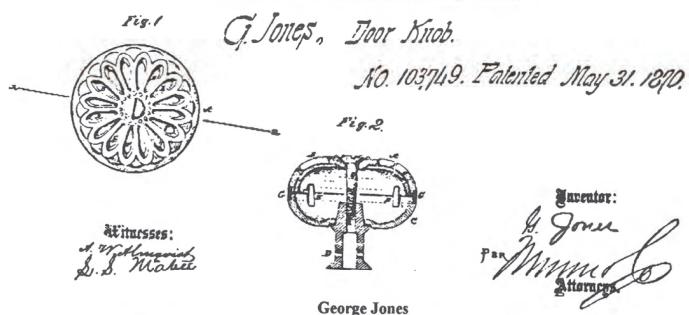
John Vickers developed his "Combined Knob-Latch and Lock" by pivoting the tumblers of a tumbler-lock upon the hub of a knob-latch mechanism of form similar to the Roggin and Crever forerunners.

Thus the transition from Thumb Latch to Knob Latch to Knob Lock as traced through one sequence of patent records. (This is not to deny the use of a knob to operate locks prior to the dates here given.)



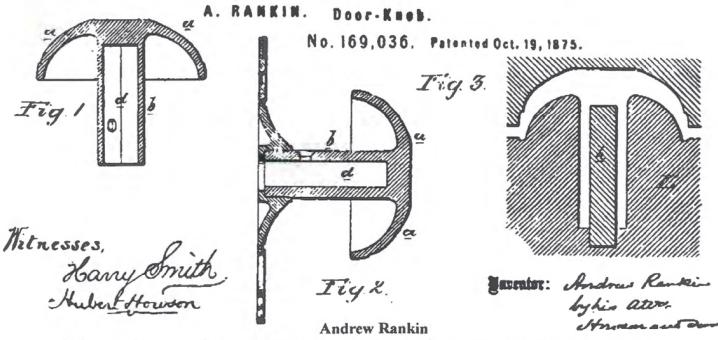
JOHN H. VICKERS COMBINED KNOB-LATCH AND LOCK.

Examples of Cast Iron Door Knob Patents of the 1870s



George Jones patent for Improvement in Door-Knobs was issued May 31, 1870 and numbered 103,749. The knob was cast in two parts and attached to the neck by a central screw. The outer portion was perforated or with openings allowing an inner piece, plated or colored, to be seen and to present an ornamental appearance.

A band of metal occupied a recess where the top and bottom pieces joined. The band could variously be plated, polished, or colored in any manner and its outer surface serrated, milled, or fluted.



Andrew Rankin, patent for Improvement in Door-Knob, dated October 19, 1875, Patent No. 169,036. The claim for this cast knob was that a one-piece knob, cast concavo-convex, would make a lighter knob and less expensive. A design could be incorporated in the mold, the stem was also formed in the mold

#### Section II

#### Victorian Iron Door Hardware

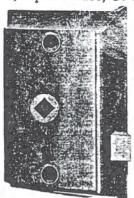
The hey-day of the Victorian era in America is often associated in thought with visions of busy gingerbread architecture and fancy cast bronze door hardware. On the other hand, little note is taken that ornamentation of Cast Iron locks was birthed in the early Victorian Days and that the later years of this era saw intense activity destined to bring cast iron to acceptability in the fine builders' hardware trade.

The material in this chapter will give evidence of the wide use of cast iron, then, up to the turn of the century when wrought steel entered the picture and economic and industrial factors dictated a change in types of buildings and hardware. By 1945 Builders' hardware manufacturers ceased to offer ornamental cast iron door hardware in their general catalogs.

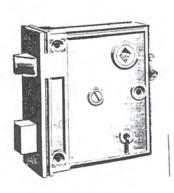
#### **Progression in Lock Ornamentation**

Not to discount the artistry apparent in early hand forged latches, the history of door hardware ornamentation in America often said to start with the era that followed the plain plate and box locks of the late 1700s and early 1800s.

The first ornamentation was accomplished through the configuration of the lock case. In manufacturer's and dealer's catalogs were found such identifying names as: Rural Case, Beveled Case, Square Case, O. G. Case, Fancy Case, Boston Pattern, and Western.



1865 Russell & Erwin Rural Case, Ornamentation in Configuration

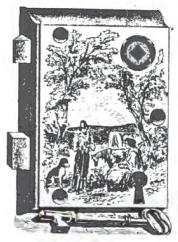


Sargent 1901
Raised Moulding Ornamentation

The next step was to add interest with raised moulding around case edges, screw holes, etc. These were illustrated in sales sheets and catalogs by 1865 along with a trio of "picture" locks designed patented seven years earlier.

Regarded as the first series of design patents issued for the ornamentation of lock cases, these inspired trio designed were labeled Emigrant, Pioneer, and Village. The patents, issued August 10<sup>th</sup>, 1858 to Cornelius B. Erwin and Henry E. Russell, (and assigned to Russell & Erwin) were labeled "design for Door Lock Plates". Examples of these locks have been found with small brass knobs of the day the type often fitted to the Carpenter locks imported from England. Such knobs could be considered appropriate for the Russell & Erwin locks, especially if the lock finish was black Japan.

This early manufacturer also offered an "Improved Eagle" ornamental Cast Iron lock at this early date.



Emigrant Patent No. 1,034



Pioneer Patent No. 1,035



Village Patent No. 1,036

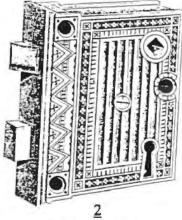
The practice of ornamenting rim lock faces (the flat surface viewed when the lock is mounted) preceded ornamentation of mortise lock fronts (the narrow plate through which the latch and lock bolts extend) but was relatively short lived due to general preference for the later mortise lock.

#### Examples of Ornamental Locks of the Victorian Era

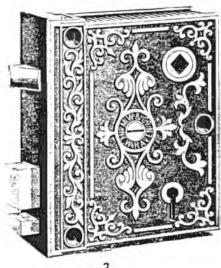
- 1 Circa 1875, Farwell, Ozman, & Kirk. Rim lock face ornamentation. Electro-plated bronze.
- 2 1879, Corbin's first Gothic Design. Patented by Barkentein.
- 3 1882 catalog, Mallory, Wheeler Patented rim Bolt.
- 4 1882, Mallory, Wheeler.
- 5 1899, Russwin, Century Design.
- 6 1892, Norwich Lock Company.
- 7 1899, Russell & Erwin fully ornamented rim lock set. Black background, light polished bronze relief. Lock and escutcheon cast iron, Knob, Wrought.
- 8 Sargent, Mortise lock, front ornamentation. Front and knob, cast. Escutcheon plate wrought.



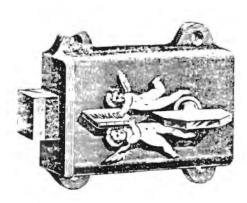
1875, Farwell, Ozman, & Kirk



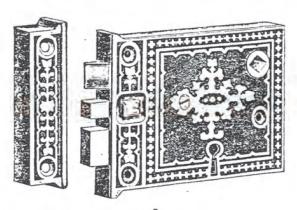
1879, Corbin



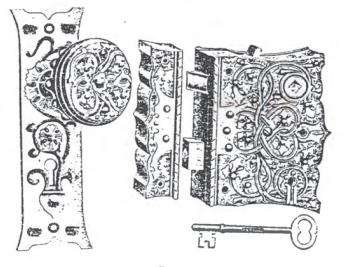
3 1882, Mallory, Wheeler



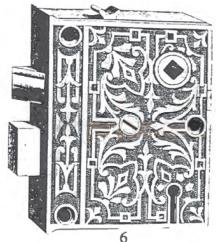
4 1882, Mallory, Wheeler



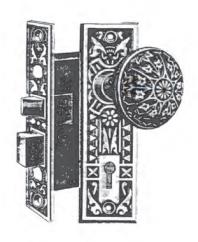
<u>5</u> 1899, Russwin



7 1899, Russell & Erwin



6 1892 Norwich Lock Company



8 Sargent

#### VICTORIAN ERA CAST IRON DOOR HARDWARE

### ORNAMENTAL CAST IRON DOOR HARDWARE

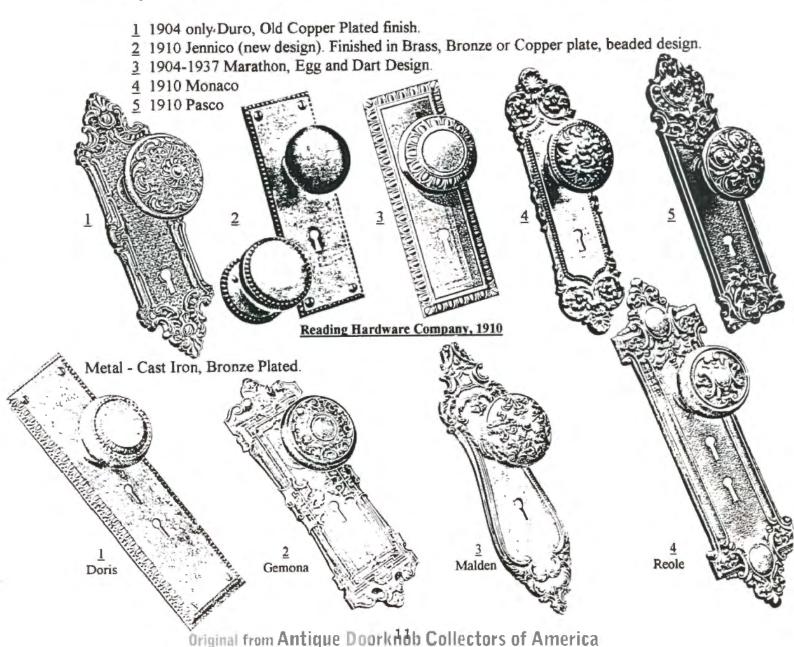
According to Yale & Towne, before their company offered a heavy, well-made line of Bower-Barff finish cast iron knobs, iron knobs were used for cheap work, only, and rarely used by architects.

This perception of cast iron door hardware changed dramatically after this same company outfitted the Rookery Office Building in Chicago in 1887 with the first ornamental, sand-blast, Bower-Barffed cast iron hardware.

As the initiator, then, of elevating Iron hardware to a level of competition with the finer metals in fine builders' hardware, Yale & Towne continued to be a leader in this field, offering more designs in this metal over a longer period (40 years) than any other hardware manufacturer.

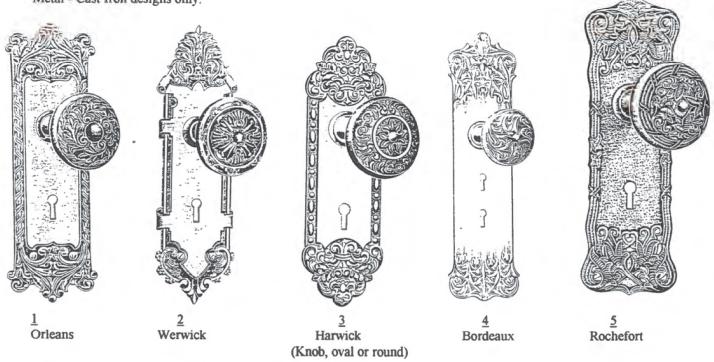
## Yale & Towne Manufacturing Company (Y&T)

Designs - 1904-1910, list of Iron-only designs (In 1910, of the total number of ornamental designs carried by Yale & Towne, 83 were offered in at least three metals, one of which was Iron).



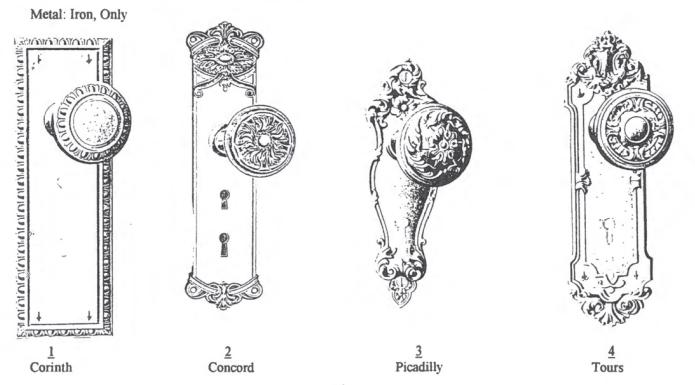
# Lockwood Manufacturing Company, 1914

Metal - Cast Iron designs only.

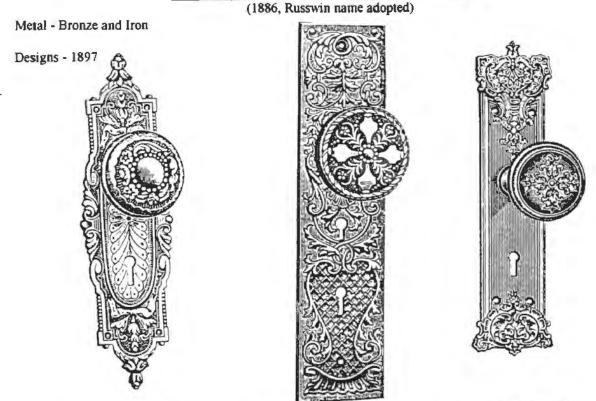


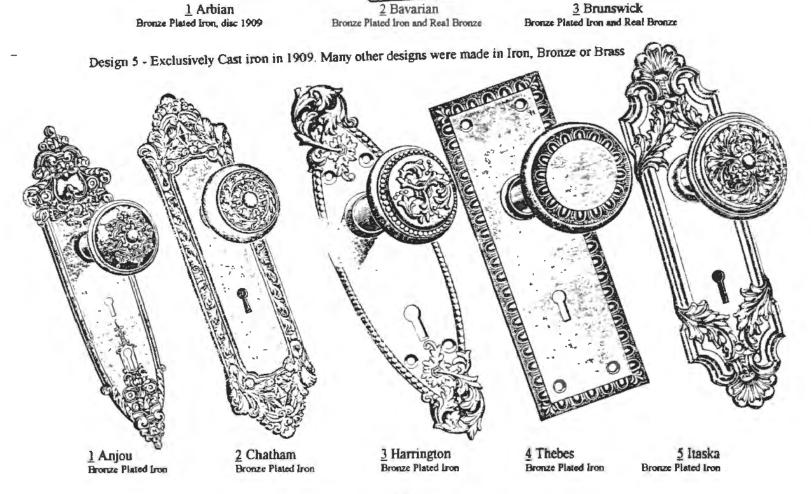
P. & F. Corbin, 1905

Examples of Corbin Company designs 1880s - 1910



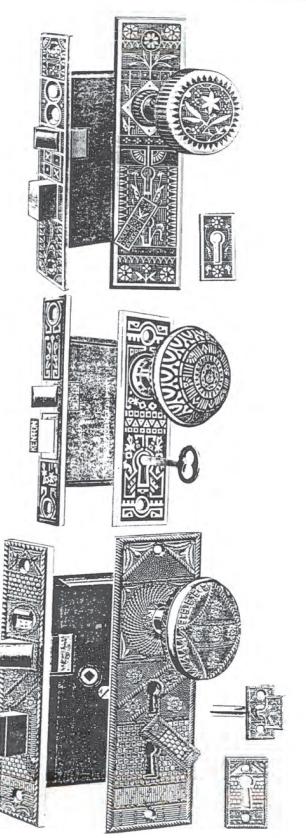
# Russell & Erwin Manufacturing Company 1880s - 1910





#### MORTISE ORNAMENTAL CAST IRON LOCK SETS

Cast Iron Trim



1 1885, Sargent, Acadia design. Rose and Escutcheon Combined for outside of door. Plate escutcheon for inside of door.

2 1892, Kenton Lock Manufacturing Company

3 1892, Norwich Lock Manufacturing Company. Persian Bronzed Iron Front Door and Vestibule Set.

#### Bronze Iron Rose & Escutcheons, combines

#### Penn Hardware Company, 1892

Note: Magnolia Design refers to all four plated.

Finish Options:

Japanned Vienna Bronzed Bremen Bronzed Dresden Bronzed Paris Bronzed









#### **EXAMPLES OF ORNAMENTAL CAST IRON DOORKNOBS AND ROSES**



1880s, Sargent R.M. Design



1880s, Sargent Arcadia Design



1892, Norwich Jet knob omamental neck & rose



1914, Lockwood Iron mountings Persian, English or Egyptian Bronzed



1883, Norwich



1882 & 1892, Norwich



1892, Norwich



1892 Norwich



1870s, R&E Bronze Plated

1904, R&E Kahala Bronze

1904, R&E Kahala Bronze



1904, R&E Kahala Bronze Rose, Porcelain knob

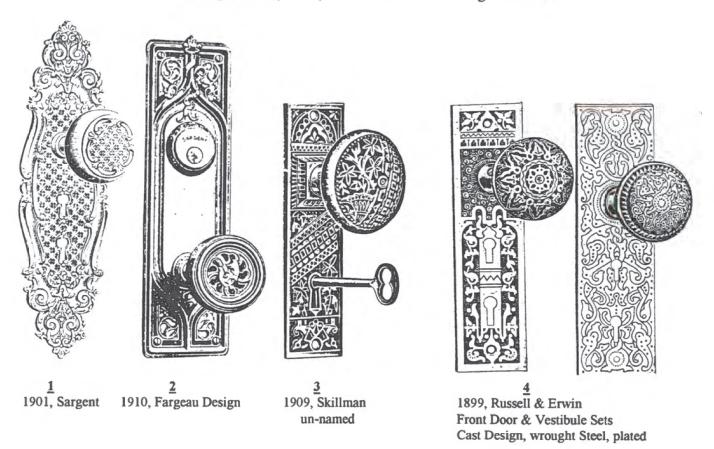


1904, R&E Centre, Door Knobs Kahala Bronze, Export Catalog

#### **DISTINCTIVE CAST IRON KNOB DESIGNS**

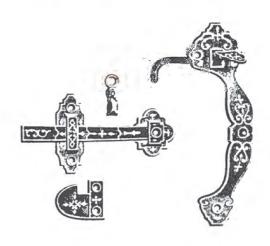
In the early days of ornamenting hardware, design names were not given. Hardware items were listed by their category and given a stock or manufacturing number. Some of the older designs, then, were dropped before a design name was assigned.

- 1 1901, Sargent, No. RB496 RM. Offered in a 1902 Sears, Roebuck & Company catalog that advertised itself as the "Cheapest Supply House on Earth." This cast iron knob and plate were electro copper plated and also offered by some outlets in cast bronze.
- 2 1910, Fargeau Design, Sargent, French Gothic School of Design. Made in cast Bronze, Brass, and Iron, Bower-Barff Rustless Iron, Sand Finish. This design was originally executed in 1901 in "rustless" blue-black Iron finish with red morocco leather background showing through open-work.
- 3 1909, Skillman Hardware Manufacturing Company. Plated Cast Iron. Great similarity to a Trenton Lock and Hardware Company knob design. (See Page 14B, Antique Builders' Hardware and Victorian Decorative Art, page 6.)
- 4 1899, Russell & Erwin, Front Door and Vestibule sets. A not unusual pairing of a cast iron front door set with a wrought steel (Plated) vestibule door set. Designs not names.



#### **ORNAMENTAL STORE DOOR HANDLES PATENT DESIGNS 1870-1873**





Sargent 1910 Catalog Design Patent 3-21 1873 Wunder's Patent 6,537

#### ORNAMENTAL STORE DOOR HANDLES AND PULLS 1899-1924, CAST IRON

#### Sargent & Company, 1901

- 1 Door Pull on Plate
- 2 Flat Key Handle
- 3 Door Handle, Verona Design

#### Russell & Erwin, 1899

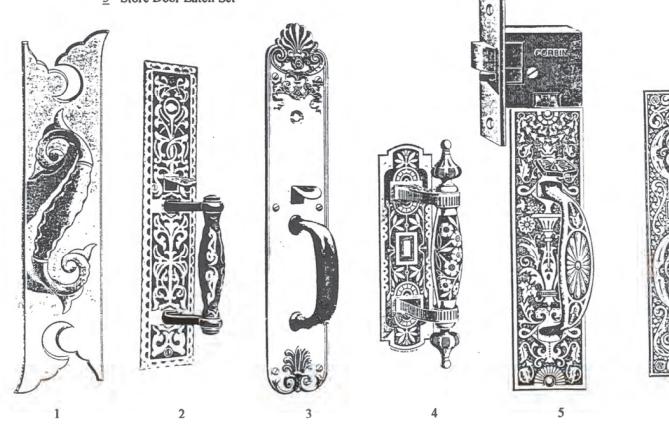
4 Door Pull, Kahala Bronze or Bronze Plated

#### Lockwood Manufacturing Company, 1914

6 Store Door Handle Lock Set

#### P. & F. Corbin, 1905

5 Store Door Latch Set



17

#### Bar Sash Lifts, Russell & Erwin, 1899

- 1 Arabian Design, antique Copper Finish
- 2 Bavarian Design, Bronze Plated

#### Door Pulls, Russell & Erwin, 1899

- 3 Group of six designs available in:
  - Kahala Bronze
  - Real Bronze
  - Bronze Plated
  - **Brass Lacquered**

#### Drawer Pulls, Russell & Erwin, 1899

- 4 Japanned or Coppered finish
- 5 & 6 Kahla Bronze or Bronze Plated

# Screen Door Hardware, Sargent & Company, 1901

- 7 Screen Door Nite Latch
- 8 Screen Door Catch



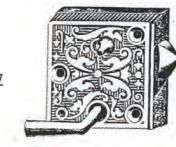






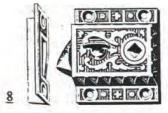














**ORNAMENTAL STORE DOOR HANDLES 1870-1899** 



Russell & Erwin 1899 Cast Iron

Russell & Erwin 1899, Store Door

Russell & Erwin 1899

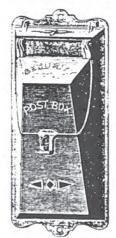
Keystone Hardware Mfg. Co. 1876

#### MISCELLANEOUS CAST IRON ORNAMENTAL HARDWARE 1880s - 1890

#### Letter Boxes and Plates



1 Standard Mailbox with paper holder wire clip Finish, Old Coppered Ornamental Iron, Farwell, Ozman, & Kirk, c.1890.



2 Heavy Japanned Iron Letter Box, Lock Manufacturing Company, 1892

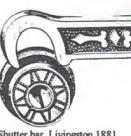


3 Letter Box Plate, Florian design, Bronzed Norwich, 1892





4 Livingston, 1881. Bronze or nickel Plated and black inlaid shutter knob.



5 Shutter bar, Livingston 1881, Bronzed.

# Door Opener



6 Pull Lever, Norwich 1892, Bronzed Iron

#### **Doorbell Buttons Levers**



7 Sargent, 1901. Push Button for double stroke bells.



8 Sargent, 1901 Door Bell Lever, Eastlake Design, Patented May 11, 1880



9 Sargent, 1901 Door Bell Lever Eastlake Design.

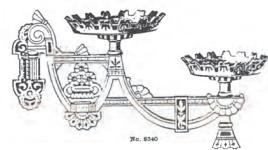
#### Flowerpot Bracket



10 Russell & Erwin, 1899. Cast metal, Kahala Bronze







#### Section III

#### Ornamental Wrought Steel Door Hardware

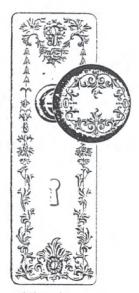
Practically all American hand-forged iron was made in the metal known as wrought iron until about the middle of the 19<sup>th</sup> century when various grades of mild steel began to be widely used for blacksmith work.

In 1890, Yale & Towne was one of the first hardware manufacturers to offer wrought steel locks. In 1891, this company introduced escutcheon plates and other plain hardware, shaped up in dies and in 1894, ornamental wrought steel lock trim. Arcadian, the first named Yale & Towne steel design, was still offered in 1910.

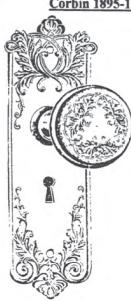


Arcadian

# Wrought Steel Knobs with Escutcheon Plates A Representation of Company Designs Corbin 1895-1905



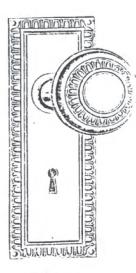
Vittoria (First wrought steel design)



Loraine



**Princess** 



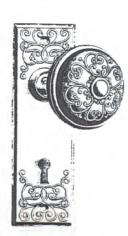
Athens New 1905





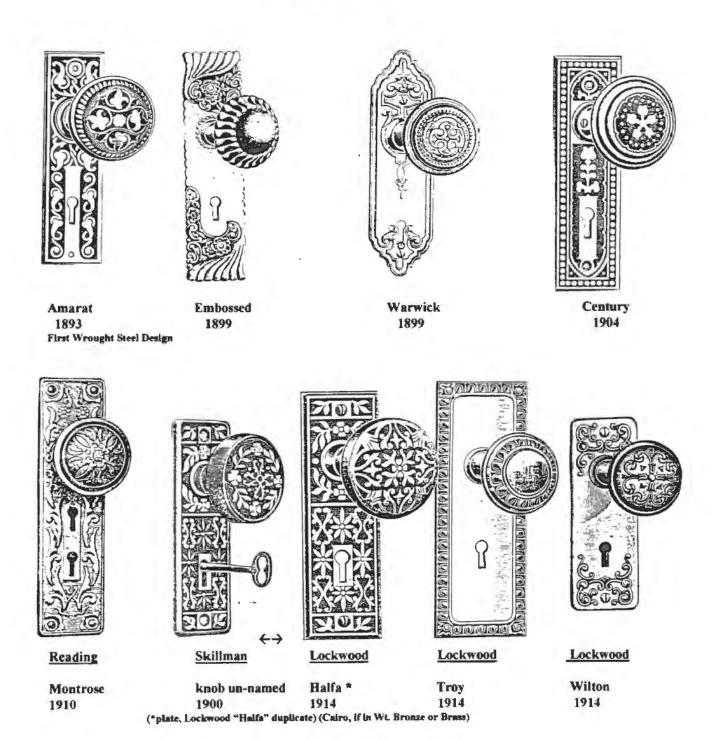


**Un-named** 



Un-named

#### Russell & Erwin



#### Wrought Steel Door Knobs with Roses









#### Russell & Erwin 1904

Wrought Rose, Jet Knob Wrought Rose, Oval Porcelain Knob P. & F. Corbin, 1895

Canton Design Round Type Canton Design Box Type





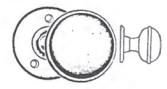




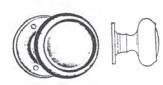
Sargent & Company 1901 (Like Designs)

un-named Round Type un-named Box Type Lockwood Manufacturing Co. 1914

Arabesque Round Type Arabesque Box Type







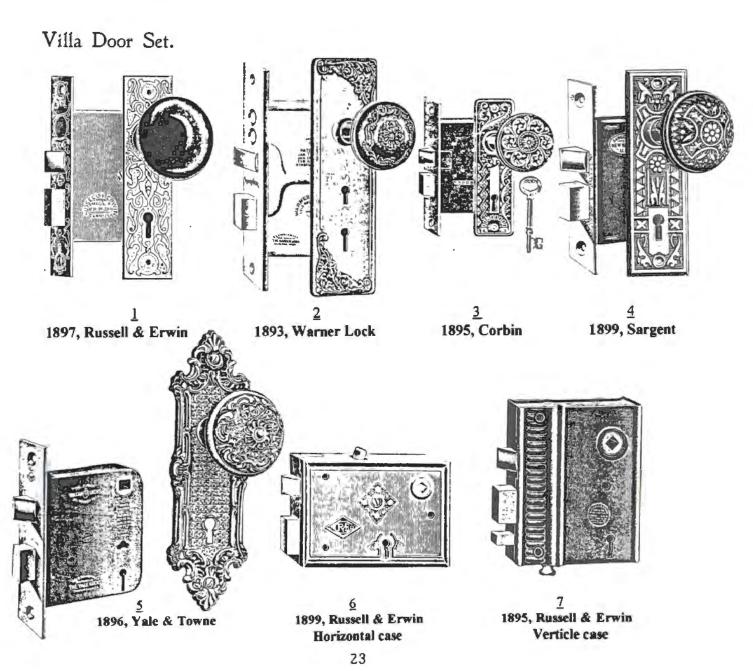
Wrought Steel Japanned Wrought Steel Kahala Two Pieces Russwin 1931 Wrought Steel Two Pieces

22

Wrought Steel Coutoured Bowl

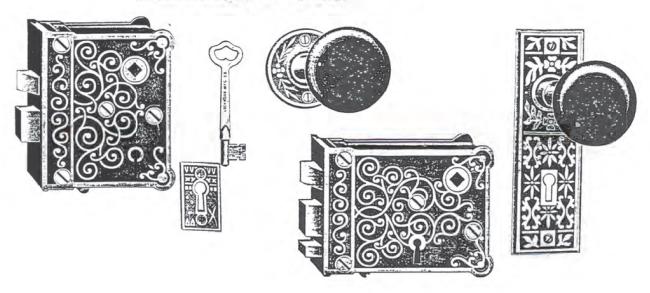
#### Wrought Steel Locks and Trim Late 1890s

- 1 1897, Russell & Erwin wrought steel lock with Bronze Plated Escutcheons and "Aradh" (black) knobs. For Villa Doors.
- 2 1893, Warner Lock, Cold rolled Steel case, plate and knob.
- 3 1895, Corbin, Drawn Sheet Steel lock with Wrought Steel Trim.
- 4 1899, Sargent, Wrought Steel Trim.
- 5 1896, Yale & Towne Vulcan Lock, Rolled Steel case. Knobs and escutcheons cast, Old Copper Plated.
- 6 1899, Russell & Erwin Wrought Steel Rim Lock, Ivory Black Finish.
- 7 1895, Russell & Erwin Rim Lock, Ivory Black finish, Wrought Steel.

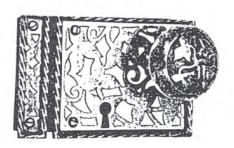


# Rim Knob Lock Sets

Cast Iron, Brass Plated, Horizontal and Vertical Locks with cast Iron rose and key escutcheon and jet knobs or a elongated escutcheon plate of wrought steel and jet knob.

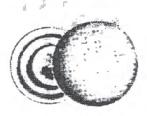


Lockwood Manufacturing Co., 1914

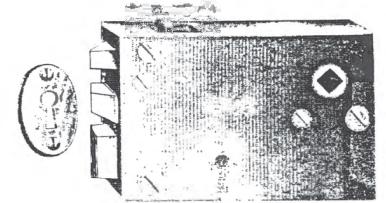


Cast Iron rim Lock with Ornamental overlay in Bronze

Reading Knob Works, c. 1925 (Cat. No. 4)



Cast Iron Manor House or Colonial rim Lock Set



Lockwood Manufacturing Co., 1914

## Leaders in the "Re-Birth" of Colonial Hardware

In 1910, Yale & Towne advocated Lift Latches for interior doors of Colonial homes. In 1940, this same company recommended their use for country and seashore houses, bungalows, etc., and for Dutch doors. Not one, but four divisions of Colonial style door hardware were noted at that time, involving Brass, Bronze, Iron and so-called white metals that resembled wrought iron.

Meanwhile, the Earle Hardware Mfg. Co., in California claimed to be the first to develop and introduce a broad line of hardware having the effect of hand-worked metal for use with the style of architecture developed in the early 1900s: Mission, Chalet, Craftsman and Bungalow.

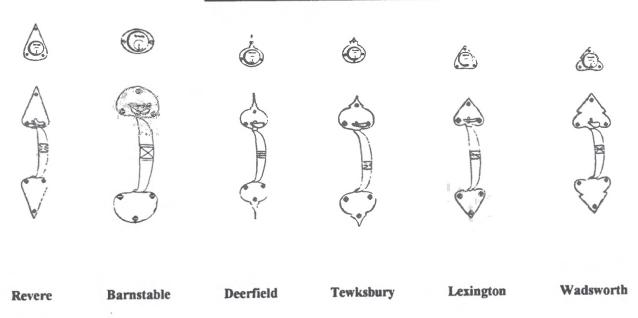
The McKinney Manufacturing Company was also among the first in the 1920s to conceive using wrought iron to produce a low-cost line of hardware of Colonial design.

P. & F. Corbin's Colonial and Early English Hardware special catalog was issued in 1927. This company's rust-proof metal from which much of their Colonial hardware of this period was made, was called Colonium. Russell & Erwin countered with Cast Russwin Metal.

To keep up with the on-going popularity of the Handle Sets, Russell and Erwin Manufacturing Company, issued a catalog in 1945 with the following divisions:

Colonial Hand Forged Iron Handle Sets and Lock Trim Russwin Metal (non-rusting) Entrance Handle Sets Residential Handle Sets Complete with Door Trim Period Design Entrance Door Handle Sets

# Russwin, 1946 HAND FORGED IRON DESIGNS



#### Old Colonial Versus Modern Colonial

OLD COLONIAL is largely taken to mean iron hinges, latches, and bolts hand wrought and painted black with small brass knobs and key escutcheon. Black Iron or brass rim horizontal locks, are Old Colonial and "proper," also a bright brass knocker.

MODERN COLONIAL refers to adapting Colonial characteristics using modern materials, of simple lines and designs, often on long, combined knob roses and plates of the finer metals.

Brass (bright or scoured) should be the metal used with Colonial Architecture. The effect with white and mahogany woodwork is pleasing and time-honored.

#### Russwin 1946 Catalog

#### **DESIGNS FOR TUBULAR LOCK HARDWARE**











Echo

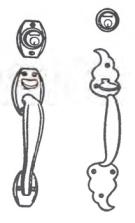
Faneuil

**Empire** 

**Bradford** 

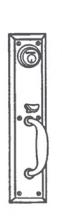
Plymouth

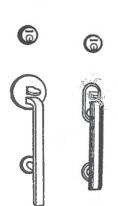
#### ENTRANCE HANDLE LOCK SET, DESIGNS













1940s COLONIAL DESIGNS

Sectional
Andre Cambridge

Combined
Roxbury 2132

Modern Combined Lenox MODERNISTIC DESIGNS
Sectional Comet Zephyr Pyr

Combined Pyramid

#### Colonial Door Hardware, 20th Century

Door hardware of necessity for America's Colonial settlements, hand forged latches and handles, became the door hardware of preference during the first half of the 20<sup>th</sup> century for post World War I architecture.

Yes, handles returned to favor for Colonial Architecture, country and seashore houses and Bungalow. The use of wrought iron and bright brass again became acceptable, even preferable for authenticates. Differences in designs within the Colonial style were due to the diversity of backgrounds of the various colonies, whether English, Dutch, French, German, etc.

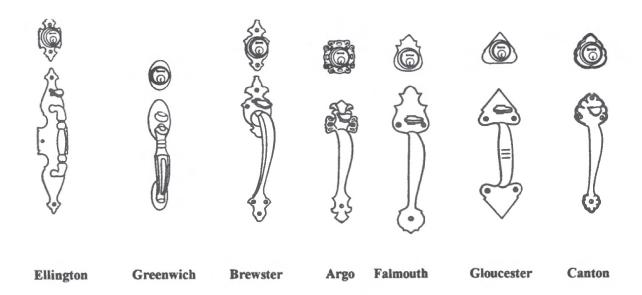
Relative simplicity, in any event, was the common thread for hardware of that era (1650, 1780s), whether for the compact dwellings of Puritan New England or the genteel Virginian plantation houses.

Colonial hardware of the early 1900s was largely Colonial in shape only, because producing top scale Swedish Iron hand-wrought duplicates of old Colonial hardware would result in prohibitive prices, several companies (Corbin, Colonium, Russwin, Case Russwin Metal, etc.) developed their own white metals that were non-resting, the same clear through and resembled iron in appearance.

Therefore, while excellent reproductions of the old were available, the cast and machine-made modern metal type supplied the greater market. Note examples of each

#### Russwin 1946

#### Residential Handle Designs



#### Thumb Latches Versus Door Handles

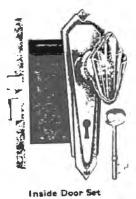
When the terms, thumb latch and door handle, were used sometimes interchangeably by different companies, confusion arose as to differences that appeared to be more evident in one era than another.

Thus in 1927 P. & F. Corbin explained the difference (at least for that era):

If to be used with a <u>lock</u>, the thumb piece is shortened and a cylinder collar is furnished and is called an entrance <u>door handle</u>. It becomes a <u>thumb latch</u> when the tail of the thumb piece is left long and a <u>bar</u> and <u>keeper</u> are furnished and the <u>cylinder collar</u> is omitted.

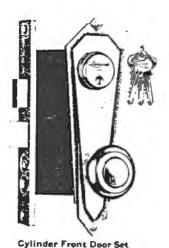
#### WROUGHT METAL DOOR SETS

#### Lockwood - 1932









with Glass Knob No. 9947 with Glass Knob No. 9946

Drake Design - Glass & Metal Knobs

**Designs in the Colonial School** 







PRINCESS



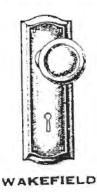


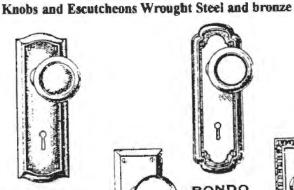
DOVER



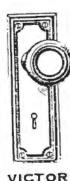


AMERICA





RONDO



VICTOR



ATHENS

SAME AND THE SECOND SEC



ANVERS

Wrought Steel

29

PORTLAND

#### Earle Hardware Manufacturing Company, c. 1935

#### Wrought Steel Doorknobs Modern Design

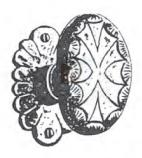


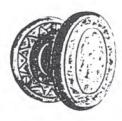




**Contoured Bowl** 

#### Earle 1925 and c.1936



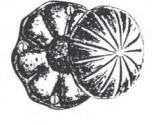






Genuine hand Forged Wrought Iron Spanish Design









Italian Design

**English Design** 

**English Design** 

Colonial Design

#### Earle 1930s













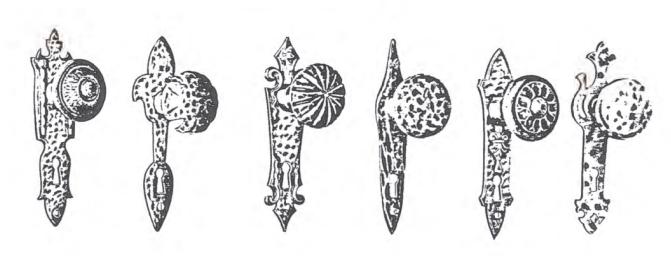




Cast Iron Door Knobs and Roses

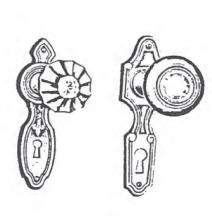
#### Earle - c.1936

### Designed Inside Door Lock Sets Cast Brass, Bronze and Iron



### Barrows Lock Works 1920-1939

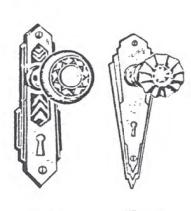
## Wrought Steel Modern and Modernistic Designs



Carleton Montrose 1920 Modern

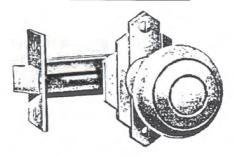






Mellville Carrisle
Pendant Design Wrought Steel
1939 Modernistic or Contemporary

## Yale & Towne - 1937



## Set-back Style Modernistic for Tubular Locks

## Chart from 1925 of all Earle's Wrought Iron Goods

WROUGHT IRON-
Adjusters
Base Knobs
Hell Huttons
Blind Holdbacks
Rosses Nails Donattes Canda
Blind Holdbacks  Bosses, Nails, Rosettes, Studs  Brackets
Cabinet Pulls
Casement Fasteners
Chest Handle
Chimney Ornaments
Coat and Hat Hooks
Cremorne Bolts
Door Bumpers
Door Handles Door Holders
Door Holders
Door Knobs
Door Rings
Drawer Knobs
Drop Rings
Drop Rings
Escutcheon
Front Door Handles
Grilles
Hinges, Ornamental
Kick Plates
Knockers
Levers
Lift Latches
Mail Boxes
Mail Boxes
Numerals
Numerals Ornamental Hinges
Dise Total
Plate Latches
Push Bars
Push Buttons
Push Plates
KIM DOITS
Kim Locks
Roses, Knob
Rosettes, Bosses, Nails, Studs
Shutter Bars
Shutter Holders
Slide Bolts
Strang
Straps
Studs, Nails, Rosettes, Bosses Surface Bolts
Surface Bolts
Switch Plates
Tee Turns
Thumb Latches
Thumb Turns

### SOURCES

Builders' Hardware Catalogs, Technical Publications, U. S. Patent Gazettes, Hardware Advertisements.

## Hardware Manufacturers' Catalogs

Barrows Lock Company 1920-1939 Branford Lock Works 1879 Buhl Sons & Co. 1884 P. & F. Corbin 1895-1905-1932 Corbin Colonial & Early English Hardware c. 1927 Catalog No. K527 Earle Hardware Manufacturing Co. c. 1925 Catalog A-3, c.1936 Catalog No. 6 Keystone Hardware Mfg. Co. 1876 1914, 1932-27th Edition Lockwood Manufacturing Company Mallory, Wheeler and Company 1882 Norwich Lock Mfg. Co. 1892 Penn Hardware Company 1892 Reading Knob Works 1925-1931 Russell & Erwin Mfg. Co. 1865-1880-1899-1904-1926-1931-1946 Sargent & Company 1899-1901 Yale & Towne Mfg. Co. 1899-1904-1910-1946

#### Miscellaneous Sources

Advertisements in Scientific Americans, Hardware, and Iron, early 1900s. Sweets, 1931.

Taking the Mystery Out of Builders' Hardware, Adon Brownell, 1940.

U. S. Patent copies.

#### Suggested Reading:

Ornamental Ironwork: An Illustrated Guide to Design, History, and Use, by Susan & Michail Southworth, Boston. David Godine, 1978.

## **Appendix**

## PROGRESSION OF METALS USED IN FINE BUILDERS' HARDWARE

Wrought Iron worked at the forge was the metal used for door hardware in the 1600s into the late 1700s, when brass came into use for moulded locks and knobs. Silver plating became the ultimate finish before the mid-1800s when iron casting became important and Mild Steel was widely used for Blacksmith work.

Bronze dominated in the production of fine hardware from the 1870s. Cast Iron for ornamental door hardware use joined Bronze introduced in the 1890s. Wrought Steel, Brass and Bronze, introduced in the 1890s, became the metal for hardware used for Modern and Modernistic designs. The white metals: Colonium, Cast Russwin Metal and White Bronze were 1930s metals for the again important Colonial revival.

Colonial and Early English type hardware that began to re-appear as early by 1910 (Yale & Towne's catalog No. 20) in Cast Iron and Bronze, appeared in the 1920s through the 1940s in Nickelene and other specialized metals called White metals that were non-rusting and the same color clear through, that in the finished product appeared like Iron.

#### IRON DOOR HARDWARE FINISHES

Because a characteristic of iron is to rust when exposed to handling and atmosphere, manufacturers of iron-based door hardware employed various finishes or coatings to protect surfaces.

Japan, a quick drying black lacquer or varnish, was in common use by the 1860s for cast iron lock and latch cases. Thus protected, when mounted for indoor use, the finish could be expected to last indefinitely. However, in the long term, Yale and Towne's Bower-Barff process gave the greatest protection.

The in-depth article of the Bower-Barff process that appeared in the March-April 1993 issue of **The Doorknob Collector** did not include coverage of the sand-blast preparatory step used to assure the long-lasting quality of this finish on Iron and Steel.

Sand-blasting the surface of hardware prior to finishing was introduced and practiced by Yale & Towne to eliminate roughness and provide an ideal surface to receive the Bower-Barff finish. Yale & Towne acquired the rights to the Sand-blast process from the inventor, Richard Tilghman of Philadelphia in the late1880s.

Because of the greater porosity of iron over steel and therefore deeper penetration of the Bower-Barff finish, the results were more satisfactory on iron. "Scaling" sometimes occurred on Wrought Steel after continued use when the Bower-Barff finish was applied.

Surface colors on iron and steel were accomplished by the use of colored japans and lacquers or by plating with copper, bronze or brass, coloring the latter as desired.

Russwin's 1909 list of iron finishes were noteworthy for the large number of options. In the total of five categories listed, the category for finishes dipped, air dried, or baked named eleven available. This list, because of its sheer diversity is listed below.

#### **Iron Finishes**

Coppered, Copper Dip
Galvanized, Zinc Coated
Gold Bronzed, Metallic Coated, Air Dried
Ivory Black, Imt. Rubber Air Dried, Baked
Japanned, Black Gloss, Baked
Japanned (Dead Black) Baked

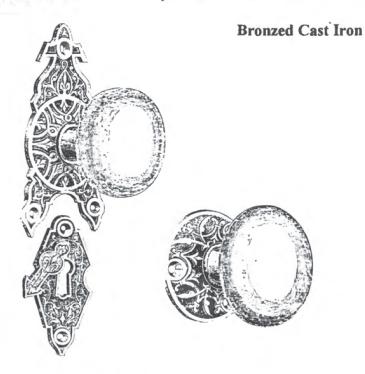
Kahala, Dark Brown Oil Finish, Baked Lacquered Oroide, Brass Plated

Silver Bronze, Metallic Coated, Air Dried White Enamel, Baked

## **Appendix**

#### SECTIONAL AND COMBINED LOCK SETS

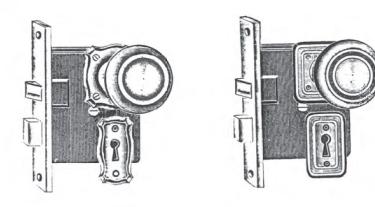
Combined rose and escutcheon plates, first generally introduced to the trade in the 1870s, became a fad and long monopolized the field until the early 1900s, when separate roses and key hole escutcheons again returned to favor with the use of thumb or lift latch for early Colonial residences. At that time they were first called "sectional" lock trim, or sets.



1870's Elongated Rose and Escutcheon Plate Sectional (Round Roses were also used)

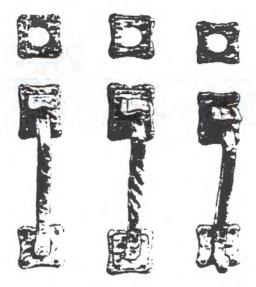


Combined Elongated Rose and Escutcheon combined Branford Lock Company, 1879



**Barrows 1920 Wrought Steel Sectional Lock Sets** 

## **Appendix**



Wrought Iron thumb Latches, Sectional Earle Hardware Manufacturing Company, 1925



## BIT KEY SECTIONAL LOCK SETS

CAST BRASS OR BRONZE AND IRON

### DATING HARDWARE BY CATALOG SOURCES

The reader should be aware that dates that appear in captions or text are not necessarily limiting as in many cases they refer only to the date of the source —— such as dated manufacturers' catalogs. Catalogs sometimes carried a design for many years, or in one issue only. Often the date introduced was not known.

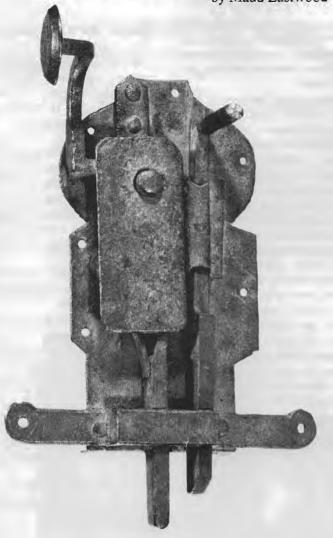
New items or designs appearing between catalog issues were often added by insertion of a page labeled "New" or the date given, with instructions to dealers for its insertion in the last catalog. These pages are extremely valuable in establishing not only the date of the product, but also the general date of the catalog, if not so identified.

Studying catalog copies obtainable through **ADCA** Archives will enlarge the vision of the Builders' Hardware field as to types, eras, manufacturers, and values so important in cataloging collections.

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## A Background Introduction to Iron Door Hardware in America

by Maud Eastwood



Early American iron door hardware, whether hand-wrought by blacksmiths or cast by iron-founders, is worthy of study. The wide use of iron for facilitating and controlling door movement preceded that of the so-called finer metals, brass and bronze.

The village blacksmith was production door bolts, bars, hasps, and latches by the early 1700s, hampered as he was by English domination and competition. Cast iron was little used before 1800. In sequence, door hardware recorded in America

progressed from wooden latches, hinges, and bolts to forged iron examples of similar forms. Improved latches and locks followed.

Four of the more distinctive early wrought types of latches in the evolution of latches to locks having knobs that turned, were Knocker latches of the early-to-mid 1700s, Escutcheon Lift latches of the mid-to-later 1700s, Suffolk latches of the late 1700s, and the Norfolk latches that superseded all other wrought-iron latches until William Blake's castiron, patented Norfolk-type latch of 1840.

The understanding should be that examples of the foregoing wroughtiron types co-existed in more than one time frame and locality, given the individuality of the blacksmiths, the unsettled state in America due to the Revolution and Civil War, and the later massive move to settle the West. Quite frankly, specific specimen are hard to date.

After 1825, a back plate was added to the basic latch parts - - the bar and catch. Those plates were square or keyhole in shape. With the later addition of springs and a cam to work the bar, came the name, latch-lock. Later, hand grasps and small, stationary knobs for lifting, sliding, depressing the bar were added. Such were the forerunners of the fully enclosed rim and mortised locks, their wrought and cast. and trimmings, knobs and escntcheon plates.

(Additional articles covering 19th and early 20th century iron hardware by Maud Eastwood will be continued in the next issue of The Doorknob Collector and will tie in with the 1997 convention theme, Iron Age.)

#### Roster Notice

The Fall 1996 ADCA roster is available to members. There are over 50 new names and changes. To receive a copy, send \$1.00 to ADCA Roster, P.O. Box 126, Eola, IL 60519-0126.

## IT'S TIME TO CHECK YOUR LABEL!!

This issue, #80, may be you last issue of The Doorknob Collector!

Look at the date behind your membership number on the mailing label. That is the date your membership will expire. If it reads 1/1/97 this will be your last issue. You can renew your membership now to insure that you will receive issue number 81 on time. Membership dues are \$25 (\$27 in Canada). Mail your check or money order to ADCA, P.O. Box 126, Eola, IL 60519-0126.

## Iron Age Builders' Hardware

by Maud Eastwood



Ornamentation - Cortona by Yale & Towne 1893 Bower-Barff with enamel tracery

In 1882 nearly all fine builders' hardware was made of bronze, castiron being rejected as inferior and unsuitable. However, that situation was about to change, setting the stage for the Iron Age in Hardware to be recognized at the 1997 ADCA convention

1882 was the year Henry Towne of Yale & Towne obtained exclusive rights to use the English Bower-Barff rust proofing process on builders' hardware in the United States. Yale & Towne's perfecting this process, coupled with the use of Tilghman's (a Philadelphia patentee) sand-blast surface treatment, led to the wide acceptance of iron door hardware by the trade.

By the end of the decade, Yale & Towne and Chicago Hardware were supplying important buildings with ornamental cast-iron hardware. This metal lent itself remarkably well to fine detailed designs.

Not to stand still, by 1890 Yale & Towne had also introduced locks cased in steel. In 1894 they offered their first ornamental steel surface trim (kuobs, plates, etc.), the design was named Arcadian. The race was on. Other companies closely copied

this first design and established lines in this practical new material.

An understanding of the three members of the iron family from which door hardware was made will help to properly label our specimen. While the allencompassing term, iron, is legitimate when referring to any one of the three members (and to all items made of this metal), familiarity with their names, Cast-Iron, Wrought Iron, and Steel, will give the collector greater confidence.

All grades of iron are down-theline derivatives of pig-iron, the product of smelted iron ores. Simplified, cast iron is made from pigiron, wrought iron is a refined product of cast-iron, and steel is a refined product of wrought-iron. Cold rolled steel is the grade of steel that can be effectively shaped by dies to form knobs, escutcheons, butts, sash lifts, etc. with each successive refinement, the material was more economically formed into a finished product.

Happily, the fastidious collector will be able to clean his 1997 convention-bound specimen without fear of critical comments about destroying clues to authenticity, or have them downgraded due to wear. This applies to hardware of castiron. This type dues not wear, the ornamentation is forever. The finish is another matter.

Bas-relief designs were technically the most suited for cast-iron although etching with chemicals and engraving with tools were also practiced.

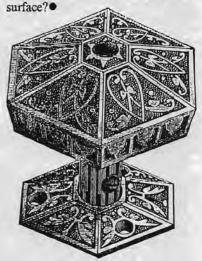
Finished plated on iron are the least durable of all finishes due to the nature of the metal to rust more or less quickly, depending on the type. The rust proofing Bower-Barff process produced the most attractive and long lasting protectiou.

Finishes used on iron goods, in addition to rust inhibiting formulas, were brown and black japanning, copper, bronze, nickel and silver plating. An earlier copper dip to retard rust left only a thin film. A popular bronze plating was called statuary bronze, used on iron and steel to impart the look of weathered statues (hence less cleaning).

Curiously, some collectors prefer to see brass and bronze finishes cleaned bright and shiny. Had this been the manufacturers original intent they would not have offered the large number of options for finishes, plating, and textures found in their catalogs.

To remove rust from Bower-Barffed cast-iron, use the finest of steel wool. To remove rust from wrought-iron, rub with a kerosene dampened cloth, then scour with extra-fine steel wool.

What examples of cast-iron hardware might we hope to see at the convention? An example from the trio of Russell & Erwin picture locks, patent dated in 1858 with scenes cast on the cover and named Pioneer, Village, or Immigraut? An 1889 Yale & Towne knob and plate with enamel tracery outlining an Estruscan school design, the tracery inlaid into a Bower-Barffed



Livingston & Co. 1875

Berlin Bronzed & Nickel plated
with Black Inlaid



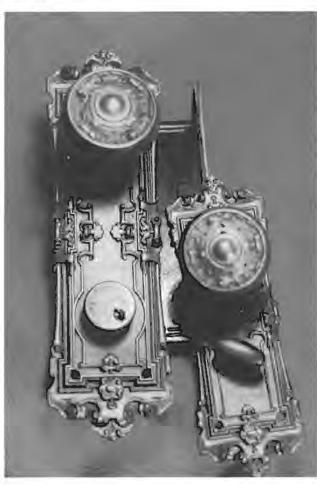
# The Doorknob Collector

Number 82

March-April 1997

## Iron Age Builders' Hardware Through the 1950's

by Maud Eastwood



Reading Hardware Co.

The use of cast iron in architecture preceded the use of cast iron for ornamental door hardware. James Bogardus of New York cast store door fronts of iron in 1846, marking the first successful use of iron for architectural purposes in America. Noteworthy examples of later date were the dome of the U. S. Capitol Building (1850) and the glass and iron Crystal Palace in New York, the scene of the first World Fair (1853).

The earliest documentation of ornamental cast iron in builder's' hardware to date covers the design patents for lock covers dated August 10, 1858, for Russell & Erwin whose 1865 catalog featured the three designs: Village, Pioneer, and Emigrant.

Consider that the 1865 catalog was issued by Russell & Erwin the year the civil War ended. At that time the usual hardware known and used was limited to black japanned castiron hinges and three types of doorknobs; dark mineral, white porcelain and glass. If anything better was wanted, the option was electro or hand plated silver or gold on plain surfaces.

Early examples of decorative cast iron knobs (c. 1860-1880) are occasionally found. These knobs appear polished but otherwise unfinished. Decoration usually involved open-work, the knob cast in one or more pieces. If multiple pieces, they were held in place by a screw or bolt. Occasionally, a finer metal inner shell provided interest. Bands of brass or bronze were sometimes used to "belt" halves together.

The next major step in cast iron use came in 1887 when Yale & Towne realized their goal of returning this metal to its "rightful place in ornamental door hardware". Yale & Towne's 1897 catalog listed thirty cast iron designs; their 1937 catalog still offered twenty-seven designs (of a total of eight-five) in cast iron, and also included wrought steel knobs in the Modern style. (continued on page 4)

## ADCA Convention, King of Prussia, Pennsylvania August 13-16, 1997

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## Builders' Hardware through 1950's

(continued from page 1)

The roles' iron played in the production of door hardware in the first half of the 20<sup>th</sup> century was dictated by the ever-changing industrial, economic, and social constraints of the country involved in two world wars in less that thirty year.



Russell & Erwin Design for door lock plate

In 1925, Earle Hardware Manufacturing Company in California introduced a line of thirty-six wrought iron door handles in "Period" design. The periods represented were Colonial, English, Italian, Mission, Spanish and Aztec. Other 1925 Earle wrought iron items included doorknobs, levers, thumb latches, knockers, hinge straps and pull handles.

Other companies quickly followed suit manufacturing their own lines of colonial Hand Forged Iron and Culonial Wrought Iron hardware for both entrance and inside doors.

By 1940, busy hardware designs were largely outdated. Colonial (having four divisions according the use and metal), Modern, and Modernistic designs were preferred. Tubular latches and locks were introduced. A 1946 Russwin Manual indicated to what extent change had

come to the hardware industry. Buildings were now plain and other made of metal. "Doors were no longer display boards for door hardware."

Lack of design as formerly known characterized hardware of Modern design. Simplicity. One or two rings on the knobs and varying outlines on the plates whose general shapes led to the name 'Pendant'. These sets were made small size in wrought steel also wrought brass and bronze and were largely used for the trim on tubular latches and locks.

Modernistic designs followed, more geometric in style (Later called Art Deco) reflecting the trend in architecture in glass sided, step-back profiles.

Truly, iron was and is the indispensable metal that makes possible the manufacture of all other metals, and is basic to the manufacture of builder's hardware.

## Souvenir Program

The Antique Doorknob Club of America will be publishing a souvenir program for this year's convention. Everyone is invited and urged to participate. Bob Rodder, convention chairman, promises it will be a very special program that all members will want to keep.

There will be a lot of information. The souvenir program will iuclnde the 1997 convention attendees, convention program highlights, ADCA by-laws, and much more.

Most important, if you are a dealer, it will contain your advertisement. For anyone looking for hardware it will be a quick and easy way to find your phone/fax number and address.

For collectors there will be pages to place greetings or good wishes or place an ad if you wish.

To make the souvenir program a success we need you to participate. A form is included with this issue

> of The Doorknob Collector with the ad rates and where to send your copy and check.

Whether you can attend the convention or not we strongly urge you to place your ad or greetings for all the members to see. It will help support ADCA, not only in this endeavor but for the future.



F-222 VITTORIA Russell & Erwin c.1895

## ADCA Board Candidates Sought

Regularly scheduled offices to be elected in 1997 are President, Vice President, Secretary/Treasurer and Directors. The elections will be held in August at the annual ADCA convention. Although there is no deadline to run for office or nominate a candidate, names should be submitted by July 1st. Contact Nominating Committee Chair:

Len Blumin 382 Trockmorton Ave. Mill Valley, CA 94941

A description of duties of ADCA officers appears in the March/April 1994 issued of *The Doorknob Collector*. They can also be obtained by contacting Len Blumin or the ADCA office.

The term for the officers and directors begins at the conclusion of the 1997 annual business meeting at the ADCA convention in King of Prussia, Pennsylvania. Terms run from the 1997 meeting to the 1999 meeting. Candidates for all positions must be active members of ADCA.



# The Doorknob Collector

Number 84

July - August 1997

## KAHALA BRONZE, A Russell & Erwin Hardware Finish

Builders' hardware catalogs list finishes for Iron and Steel separately from finishes for the other metals. Russell & Erwin's (R&E) 1899 catalog provided eight finishes in the Iron and Steel category.

Three of those 1899 finishes were quite unusual: Oroide (Gold Colored Plate), Florentine Finish (Chocolate Background, Light Polished Bronze Relief), and Kahala Finish (Dark Brown Color). The Kahala Finish begs further explanation due to its continued use over a number of years and the terms' seemingly inconsistent usage over those years.

Because this finish was variously labeled "Kahala," "Kahala Finish" or "Kahala Bronze" the question arises, "Just what was Kahala"? A 1909 definition revealed this finish to be "Dark Brown Oil Finish, Baked." Therefore, Kahala would not be a brown Japan (Brown Japan was not unusual as a finish) for Japans are baked enamels.



## ADCA Convention, King of Prussia, Pennsylvania August 13-16, 1997

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