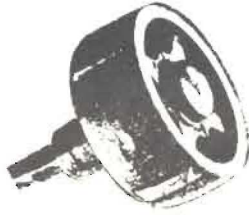


The pre-eminent early Chicago skyscraper, the Rookery, was completed in 1888.

With its great cage of glass and iron serving as a lobby, the Rookery is one of the outstanding achievements of the architectural firm of Burnham and Root and was one of the Chicago school's most dynamic interiors. The lobby was changed considerably during a 1905 modernization by Frank Lloyd Wright. The building is still standing today.

Hardware: cast iron, Bower Barff finish, by Yale & Towne



Rookery Bldg.



Manhattan Bldg.



The Manhattan Building, Chicago, (1891), is an early "skyscraper" designed by the architectural office of William LeBaron Jenney who was considered to be one of the prime innovators in the development of tall metal-framed office buildings. The building has recently been converted to apartments.

The hardware in the Manhattan was produced as the "Columbian" line by Reading, but the similarity of the ornament on the hardware to other ornament in the building suggests that perhaps the hardware was custom designed for the building and later incorporated into the general line - more research needed.

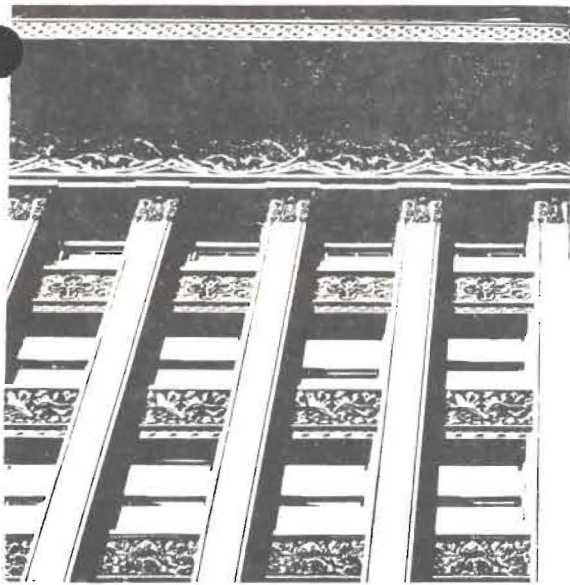
The Schiller Theatre Building, Chicago, (1892) - later renamed the Garrick - was one of Adler and Sullivan's most pleasing achievements. The theatre occupied the first seven stories. The tower contained offices, including the one where, in 1893, Frank Lloyd Wright began his private practice.

Adler's superb orchestral shell made the Schiller one of the country's most acoustically advanced houses. This gem was destroyed in 1960 and replaced by a garage.

Hardware: Bower Barrfed iron by Chicago Hardware.



Schiller Theatre Bldg.



Wainwright Bldg.



The Wainwright Building, St. Louis, Mo. (1892) Adler and Sullivan, Architects.

In one of his essays Sullivan reflected on the chief characteristic of the tall office building: "It is lofty - it must be every inch a proud and soaring thing". The Wainwright building in its expression of verticality and unity influenced the development of the modern skyscraper.

Sullivan achieved this upward thrust with seven story red brick piers between the ranks of windows, the piers set forward and given prominence by their smoothness in contrast to the ornamental red terra-cotta spandrels.

Hardware: Cast iron, Bower Barff finish, by Yale & Towne

Isabella Building, Chicago, (1893) Jenney & Mundie, Architects.

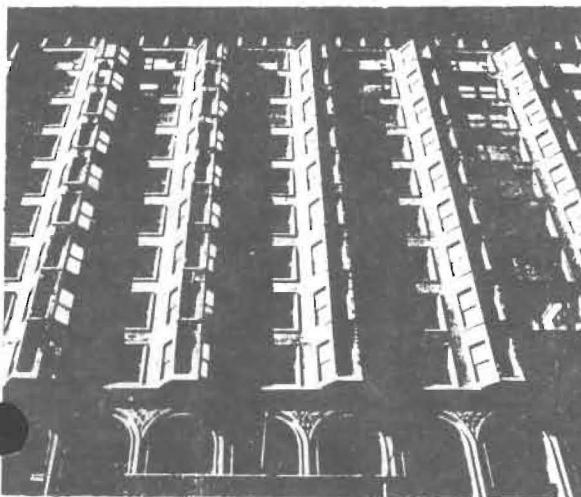
The Isabella was a combination office building and headquarters for the Daughters of Isabella, a woman's organization. It was one of the first buildings in the world to use aluminum for its hardware and architectural trim. Rare and costly in 1893, It was used only on the public lobby floor - the rest of the building was furnished with less costly brass hardware.

The building has been greatly altered due to a fire.

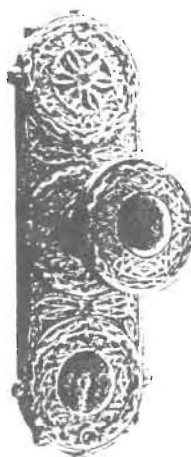
Hardware by Yale & Towne



Isabella Bldg.



Stock Exchange Bldg.



Another Adler and Sullivan landmark was the Chicago Stock Exchange on the corner of LaSalle and Washington Streets, completed in 1894. The special glory of the Exchange was its intricate "Sullivan-esque" iron work as indicated by the exquisite door hardware.

The powerful facade is shown on the left. This view was taken by photographer Richard Nickel, who lost his life in the building's demolition in 1972.

Hardware: Cast iron, Bower Barff finish, by Yale & Towne



Marquette Bldg.

The Fisher Building, Chicago, (1896), is another early "skyscraper", designed by Peter Weber of the architectural firm of D. H. Burnham & Co.

The building is distinctively detailed with gothic inspired ornamentation. The fish on the doorknob is a motif repeated on details throughout the building. The Fisher Building is still standing

Hardware: Cast iron and brass by Corbin.



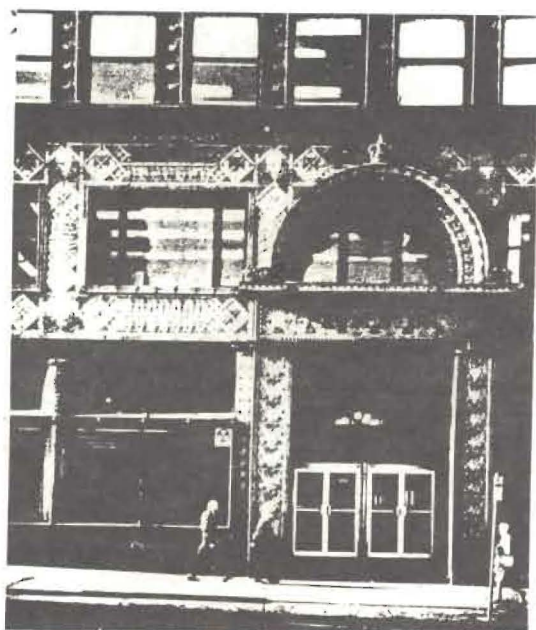
The Marquette Building, Chicago, (1895) is an important early "skyscraper", designed by the noted architectural partnership of Holabird & Roche.

The Marquette Building hardware marked the commercial introduction of "Yale Silver", a beautiful copper/nickel alloy material. The design was custom prepared for the Marquette by the architects. Both the knob and plate were later produced as a stock pattern by Yale & Towne as the "Rhodes" design.

The building is still standing.



Fisher Bldg



Guaranty Bldg.



The Guaranty Building, Buffalo, N.Y. (1896) - renamed the Prudential in 1899 - is one of the finest contributions to modern architecture by Adler & Sullivan.

The terra-cotta skin with lush flower like patterns is an expression of Sullivan's personal and poetic vision.

Never have steel and "cooked-earth" been more artfully wedded as in the medley of earth colors high above the street.

The building is still standing.

Maudie Eastwood told us at the 1984 convention that you may attract hardware by joining clubs, giving lectures, participating in exhibits and getting publicity through newspaper articles and the like. News of collectors heeding this advice follows:

Kae and Ray Zyc were unable to attend the 1985 convention but they have not been inactive as far as their display activity is concerned. As Janesville, Wisconsin celebrated its 150th anniversary, Kae and Ray set up a display of their collection at a downtown bank and won the \$100. first prize.



Kae and Ray in victorian costume

Vince Noe, our club award designer displayed choice segments of his collection at a library and at a nursing home in Metamora, Ill.



Vince's travelling display

E.P. Dick has presented his collection to fellow tenants at Walker Place, the Dick's new retirement residence in Minneapolis, Mn.

Display news continued:

Emmett and Marjorie Weimer were interviewed by a reporter and featured in an article "On the Arizona Road". The article noted that their collection had won a blue ribbon for the best of show at the Verde Valley Fair in Cottonwood, Az.

From the Carson City, Nevada APPEAL, November 10, 1985.

Judy Rhea of the Nevada Artists Assoc. has set up a display of antique door-knobs at the Carson City Post Office. The collection belongs to Maudie Eastwood of Tillamook, Ore., author and authority on antique doorknobs. The collection includes cast bronze, crystal, wrought iron, brass, stone, composition, wood and pottery knobs.

Loretta and Ray Nemec were among 25 collectors participating in the annual "Collectors Showcase" on Jan. 25th in the Arlington Heights, Il. Public Library

CLASSIFIED AD SECTION

Members are reminded that your dues entitle you to advertise items for sale or trade or for items wanted, at no charge.

WANTED: Old and unusual adjustable (monkey) wrenches. Will trade for doorknobs. Send photo or drawing.

Charles Wardell
P.O. Box 195
Trinity, N.C. 27370

WANTED: Information on door hardware pieces bearing unusual trademarks, trade or personal names. Also, patent numbers or dates and manufacturing sequence numbers. These later numbers denote the number of pieces made of a specific and unusual design - as opposed to the factory lot numbers, which are often inscribed on the back side of escutcheon plates, in 1 or 2 digits.

Information may be sent in the form of descriptions, rubbings, drawings or photos. Postage and other expense will be covered.

Maudie Eastwood
3900 Latimer Road No.
Tillamook, Ore. 97141

Our Collecting Experience



Lee and Jim Kaiser

This issue of the D. C. features the collection and some of the favorite knobs of the editors.

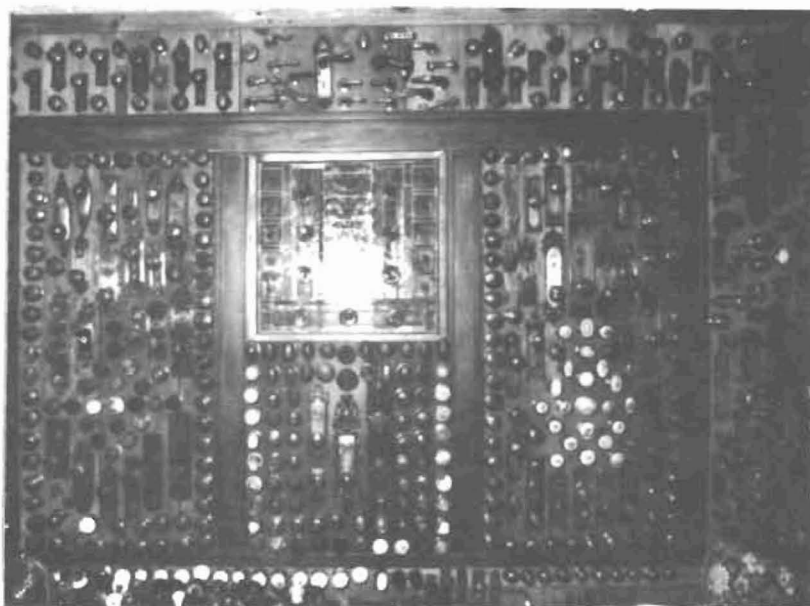
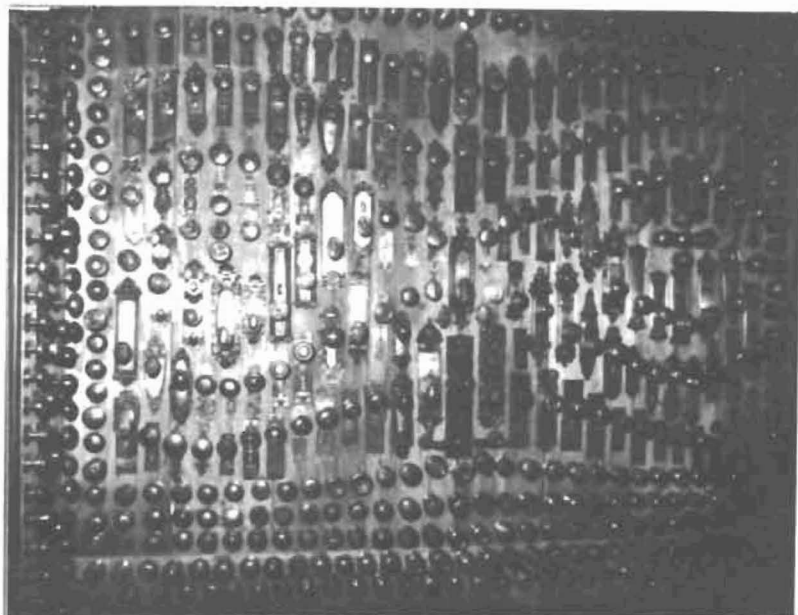
We display a large part of the collection in a small sitting room that has been paneled in weathered barn wood. As the collection grew several windows were boarded over, and finally we set up another barn wood wall upstairs.

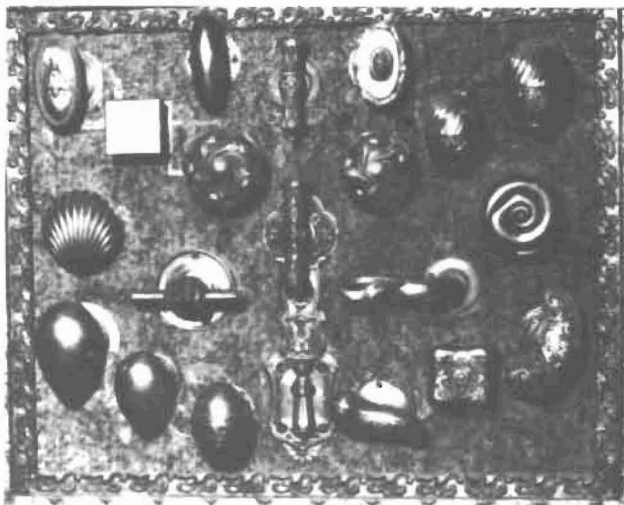
We use picture frames for specialty knobs.

We, like so many other doorknob collectors thought at first that we were unique in our fascination with door hardware.

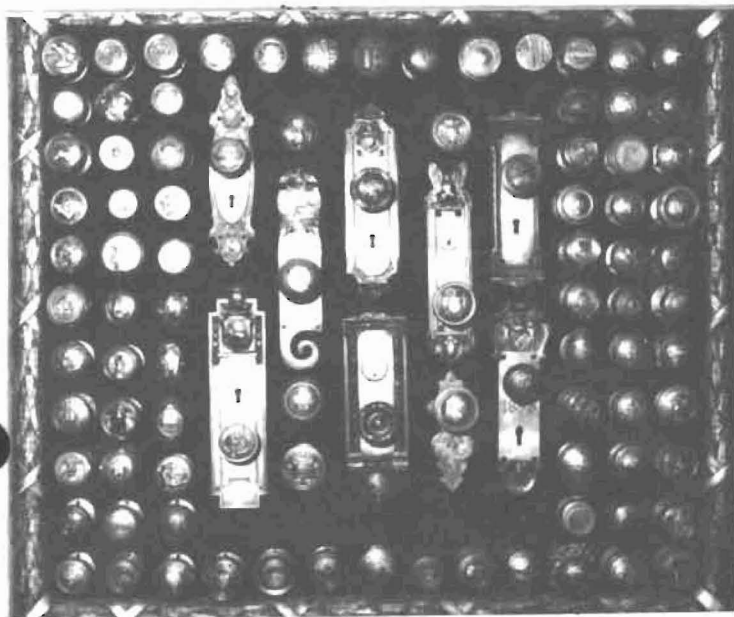
It started about 15 years ago, while closing up the farm house of a deceased relative. We noted that the front doorknob was different than the white porcelain knobs on all of the other doors.

continued

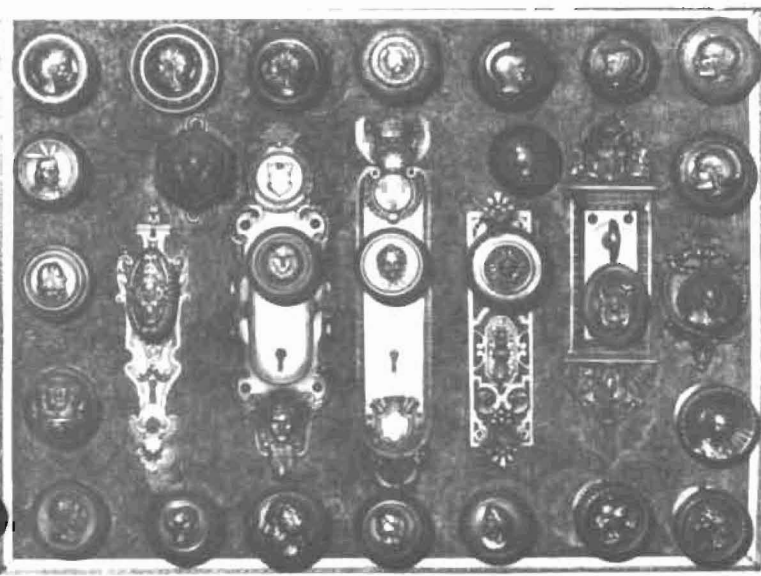




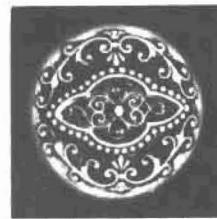
"Oddies"



Emblematics



Faces



The First



The Clinker

After cleaning the paint from the knob it was found to be cast iron and it had a delicate and pleasing design.

After that we began to take note of doorknobs in antique shops and at flea markets. The next 5 or 6 acquisitions were of the wrought steel type - and then we found a cast brass knob with a fetching Branford pattern - that did it - We became COLLECTORS!

Our collecting capabilities were greatly enhanced by Maudie Eastwood's willingness to assist in associating us with others with this common interest.

Many vacations were spent searching out known collectors and in tracing other leads. We have been successful in buying or trading knobs in forty-three states and Canada. Oddly, we were not able to find a knob in Connecticut, where so much of the hardware originated.

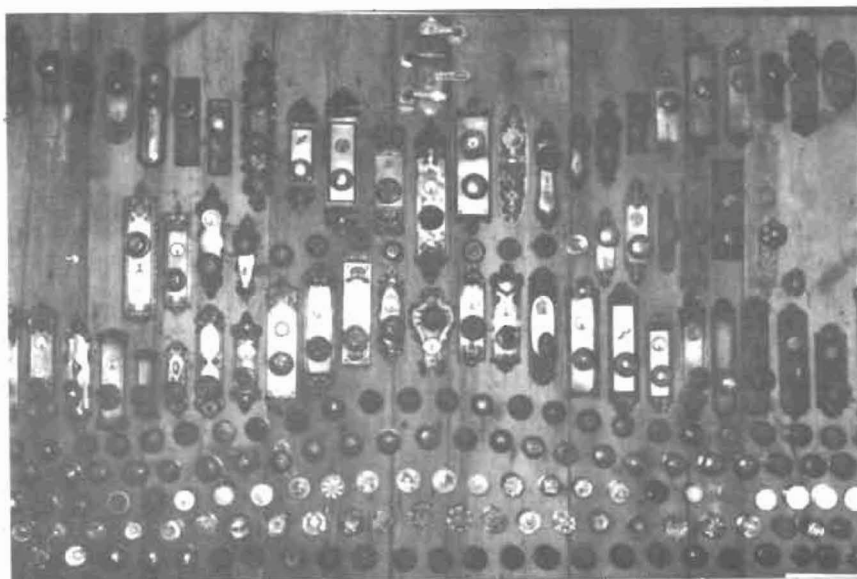
We try to find both sizes of a knob and we make a special effort to find matching escutcheons, because in many instances, the full expression or concept of the design is incomplete without the escutcheon. This approach leads to a display space problem - but this a nice kind of problem.

If we were somehow faced with the awful dilemma of being able to retain just one knob from the collection, Lee's choice would be The "Doggie" and Jim would take the Kreuzinger "Lion". Other favorites are shown on the next page.

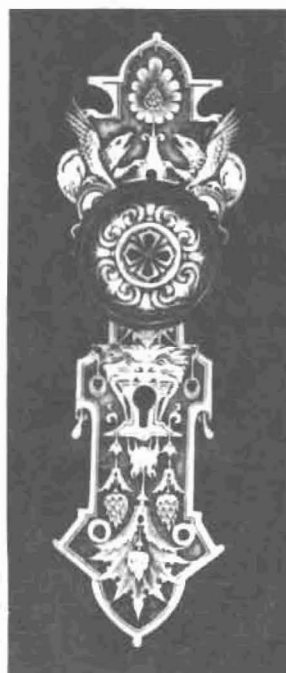




Acquired at St. Charles
auction



Upstairs



Early Russell & Erwin



Wedgewood type



Russell & Erwin



Pfeil & Stedall
London - Patent 1858

METALS USED IN BUILDERS HARDWARE

Many different metals and their alloys are used in the fabrication of builders' hardware, either structurally or as a protective covering or finish coating.

No attempt will be made here to list all of the metals so employed, but the principal ones are as follows:

Brass is yellowish in color and is fundamentally an alloy of copper and zinc, although for many purposes lead and tin, and sometimes other metallic elements, are also added. There are many different formulas for brass, depending upon the purpose for which it is to be used, the copper content usually running from 60% to 75%, the zinc content from 25% to 35% and the other elements from nothing to an aggregate of 4 1/4%.

Brass may be either melted and poured into molds, thus forming cast brass articles, or may be rolled into sheets from which "stamped" articles are formed in presses equipped with dies for the purpose.

Brass is very durable, readily machinable, takes a beautiful finish and makes an excellent base for plated finishes.

Most hardware manufacturers operate brass foundries for molding brass castings. Rolled sheet brass, however, is purchased in strips or coils from mills usually owned and operated by others.

Bronze is reddish in color and is fundamentally an alloy of copper and tin, although in practically all commercial bronzes zinc and lead, and sometimes nickel and other metallic elements are also added, depending upon the color, machinability, toughness or hardness required.

There are many different formulas for bronze, the copper content usually varying from 80% to more than 90%, the tin content from 2% to 11% and the aggregate of the lead, zinc, and other ingredients from 3% to 10%. One common formula is copper 85%, tin 5%, lead 5% and zinc 5%; the bronze for items used as builders' hardware finishing trim usually has a copper content of approximately 90%.

Bronze, like brass, may be melted and poured into molds to form bronze castings or may be rolled into sheets from which bronze stampings are fabricated.

Bronze is very durable, takes a beautiful finish and makes an excellent base for plated finishes.

Most hardware manufacturers operate foundries for molding bronze castings. Rolled sheet bronze, however, is purchased in strips or coils from mills usually owned and operated by others.

Refer to Page No. 43A for article on "White Bronze".

Brass vs. Bronze—Technically speaking, brass is basically an alloy of copper and zinc, and bronze an alloy of copper and tin. Commercially, however, the principal difference between them is the copper and zinc content. Yellow brass contains less copper and more zinc than commercial bronze, which accounts for the difference in color. The greater percentage of copper in bronze produces the reddish color; the greater the copper content the more pronounced the red color.

For some mechanical parts which are subject to excessive strain or wear, bronze is preferable to brass. For other purposes in connection with builders' hardware, however, the only practical difference is that of color. Our tests indicate that in practise they are equally good as an underlying base for plated finishes.

For these reasons brass is sometimes commercially referred to as yellow bronze, and where bronze metal is listed in the pages of this catalog as the metal from which various parts are made, either brass or bronze may be actually employed.

The term "Bronze" includes both brass and bronze, and in commercial practise in the builders' hardware industry it is customary to differentiate between them only in so far as color is concerned.

Cadmium is a rather soft, white, crystalline, metallic element similar in appearance to tin. It is whiter than nickel but less so than silver. It is found in nature in conjunction with several minerals, and compounds of cadmium frequently occur associated with zinc ore.

It is not employed as a structural part of builders' hardware items, but is used as a protective coating over other metals, electrolytically deposited. Refer to Page No. 44A for article on Cadmium Plating.

Chromium is a hard, tin-white, metallic element occurring in nature only in combination with other elements. The principal ore is chrome-iron ore which contains about 68% of chromic oxide, the metal being obtained by the reduction of this oxide with aluminum.

Chromium is used for many purposes, notably in the manufacture of hard steels and stainless steels and also in compounding dyes and pigments. In builders' hardware products, however, it is used principally as an electroplated finish coating over other metals. When properly so applied it produces a hard, durable, rich, tin-white finish that is becoming increasingly popular and in commercial demand is rapidly replacing nickel finishes on many hardware items.

Also refer to Page No. 44A for article on Chromium Plating.

Copper is a tough, ductile, metallic element, reddish in color, deriving its name from the island of Cypress, where it was mined extensively. It is mined in nearly all countries, especially in North and South America, and large ore deposits are found in this country in several of the Rocky Mountain states and in upper Michigan.

After the many operations of smelting and refining the ores, commercial copper is molded into different shapes to meet the special requirements of each industry using the metal. These shapes are known as "square cake", "round cake", "billet", "slab", "wire bar", "ingot bar", and "ingot", the "ingot", weighing approximately 25 lbs., being the form commonly melted in brass foundry crucibles.

Copper is available in several grades, but the grades commercially known as "Lake" copper and "Electrolytic" copper are predominantly used by manufacturers of high quality builders hardware. Lake copper is mined in the Lake Superior district of upper Michigan. Electrolytic copper is refined by the electrolytic process and its purity runs from 99.93% upwards.

In the manufacture of builders' hardware, ingot copper is alloyed with other metals to make brass, bronze, white bronze, etc., for casting purposes. Copper is also the largest single ingredient in sheet brass and sheet bronze from which "wrought" hardware articles are stamped. Specially shaped copper bars, plates, etc., are used for anodes in copper plating and copper-containing chemicals are used in copper plating solutions.

Iron, the most useful and one of the most abundant of the metallic elements, is derived principally from ores which are chiefly oxides and carbonates. When pure it is silvery-white and very tenacious, malleable and ductile. Commercially it is never pure but combined with carbon, phosphorus, silicon, sulphur, etc., with which it forms important alloys. Steel, in all its classifications, is a compound of iron, carbon and other elements, principally iron.

Iron, aside from that contained in steel, is used in builders' hardware principally in the form of Gray Iron Castings and Malleable Iron Castings.

METALS, Con't.

Gray Iron Castings contain a relatively large percentage of graphitic carbon. They are strong and comparatively light, but somewhat brittle unless carefully annealed.

In connection with builders' hardware, Gray Iron is admirably suitable for castings of many of the component parts of lock mechanisms, lock cases, some knobs and escutcheon plates, and quite a few items of so-called miscellaneous hardware.

Malleable Iron Castings are iron castings that have been rendered tough and malleable by long-continued high heating while imbedded in hematite, ferric oxide, or some other decarbonizing material, and allowed to cool slowly. In builders' hardware, Malleable Iron Castings are used where iron is desirable for certain parts that should be tougher and stronger than if made of gray iron.

Lead is a soft, heavy, inelastic, malleable, ductile, bluish-gray metallic element. It is found in some 60 different ores, only three of which are of importance, and frequently occurs in combination with silver. Lead ores occur principally in Great Britain, Germany, Spain and the United States. After smelting, lead is molded into "pigs" weighing approximately 100 lbs. or ingots of about 25 lbs. for convenience in handling.

Lead has a great many uses in many industries. In the production of builders' hardware its principal use is as an ingredient in copper alloys such as brass and bronze.

Nickel is a hard, malleable, ductile, silver-white, lustrous, metallic element almost always found associated with cobalt. The largest and really only commercial deposits of nickel are those of New Caledonia, a French possession in the Pacific Ocean; at Sudbury, Ontario, Canada; and in Norway; although lesser deposits occur in Saxony and elsewhere.

Commercial nickel is smelted and refined principally from three types of ores, namely, the sulphides of Ontario and Norway, the silicates and oxidized ores of New Caledonia, and arsenical ores of Ontario and Saxony.

Nickel appears in the market in many forms, depending upon the commercial requirements for its use. Among many other uses, it is extensively employed as an ingredient in the alloying of nickel-steel, stainless steel, white bronze, etc., and as a nickel-plated finish for a wide variety of articles.

In builders' hardware, nickel "blocks" or "shot" is alloyed with copper and other metals to produce bronze and white bronze. Nickel anodes, usually in the form of bars, are used in nickel-plating; and nickel salts are an ingredient of nickel-plating solutions.

Refer to the article on "White Bronze" elsewhere on this page and to Page No. 45A for Nickel Plating.

Nickeline—Same as "White Bronze".

Spelter is a commercial term for Zinc. Refer to "Zinc" elsewhere on this Page.

Steel is merely alloyed iron. The total amount of alloyed substances may be incredibly small and yet produce the most profound changes in the character of the iron. Steel is harder and much more elastic than cast iron.

Its many varieties are classified according to: (1) the presence or absence of slag, as, "slagless" steel or "slag-bearing" steel; (2) the carbon content; as, "decarbonized" steel, "low carbon" steel, "mild" steel, "medium-carbon" steel and "high carbon" steel; (3) their alloys; as, "chrome" steel, "manganese" steel, etc., and (4) the method or process of manufacture; as, "basic" steel, "Bessemer" steel, "crucible" steel, "open-hearth" steel, etc.

Steel is used for innumerable purposes and in many forms. In builders' hardware products the principal types used are Cold Rolled Strip Steel and Cold Drawn Rods.

Cold Rolled Strip Steel, as used for builders' hardware, is a steel of proper analysis for the intended uses, that is rolled into thin sheets of predetermined thickness and smoothness of surface, and from which stampings are produced. This steel is purchased in coiled form or in strips cut to various lengths, and comes in a variety of tempers or degrees of hardness to suit every purpose. Some builders' hardware items, such as lock tumblers, are made of a relatively hard cold rolled steel; and others that require embossing or deep drawing operations, such as door knobs, some designs of escutcheons plates, etc., are made of a softer steel that can be readily embossed or drawn into shapes on presses equipped with dies for the purpose.

Cold Drawn Steel Rods are made in a wide variety of shapes by extruding steel of proper analysis through a series of drawing dies. In builders' hardware, square cold drawn rod or wire is used for knob spindles, round rods in extension bolts, etc.

Tin is a white, malleable, crystalline, lustrous, metallic element rarely occurring native, but most always in combination with other elements. The principal ore is the oxide cassiterite, which is always associated with granitic rocks. In workable quantities tin ores are found principally in Australia, Bolivia, China, Cornwall, Dutch East Indies and in the Malay peninsula.

After the smelting and purifying processes, tin is commercially used for a wide variety of purposes, such as for tin plate, solders, tin-foil, bearing metals, lining for cooking extensils, etc. Though rather soft itself, tin possesses the remarkable property of imparting to certain alloys a high degree of hardness. It is used in the manufacture of builders' hardware products chiefly as one of the ingredients of red bronze and white bronze.

White Bronze is an alloy of copper, nickel and zinc, to which other metals are sometimes added for special purposes. The term "White Bronze" embraces a variety of copper-nickel alloys of different analyses and known by many names, such as "nickel silver", "nickeline", "nickel-bronze", "German silver", etc. "Monel metal" contains approximately 67% nickel, 28% copper, and 5% other metals, chiefly iron, manganese and silicon.

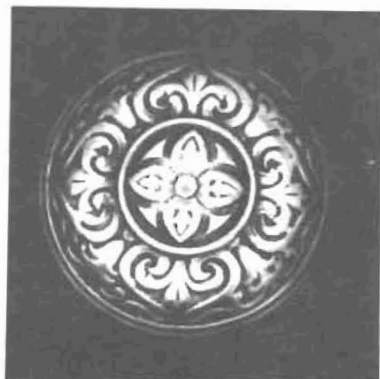
Commercial white bronze is very hard and tough and is white with a yellowish cast. It is used for many purposes. In builders' hardware it is used for white bronze castings; and because of its qualities of hardness and toughness "nickel silver" is the metal from which keys for high grade cylinder locks are made.

Zinc is a bluish-white metallic element known to the trade as "spelter". It is found in many countries and usually occurs in combination with lead and silver. Most of the metal is recovered from "blende", the sulphide ore; although a good deal comes from the silicate and carbonate ores.

After the smelting and refining operations, spelter (zinc) is molded into slabs weighing about 50 lbs. for convenience in commercial handling. It is extensively used in the arts, as in the manufacture of brass, as the positive element in electric batteries, in the manufacture of galvanized sheets for roofing, etc.; and salts of the metal have varied uses, as the oxide in painting, and the chlorid and sulfate in medicine.

In the builders' hardware industry it is employed principally in the manufacture of the alloys known as brass and bronze; and is also used as a plated protective coating for iron and steel, electrolytically deposited. Refer to Page No. 45A for article on Zinc Plating.

Variations



Members will be saddened to learn of the sudden and unexpected death of Pat Cody, of Holmes, Pennsylvania, last November. Much of Pat's collection was auctioned at the 1984 convention in Waverly, Ia.

**The
Doorknob
Collector**

4125 Colfax Avenue South
Minneapolis, Minnesota 55409



Door Hardware for the Chicago
Stock Exchange - designed by
Louis Sullivan