

Locks and Builders Hardware

A Hand Book for Architects

BY

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Profusely Illustrated

NEW YORK

JOHN WILEY & SONS

LONDON: CHAPMAN & HALL, LIMITED

1904

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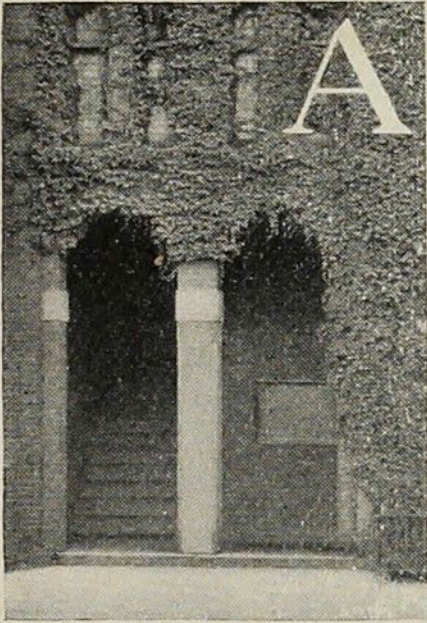
PRESS OF
GILLESPIE BROS.,
STAMFORD, CONN.

TO
AMERICAN ARCHITECTS,
WHOSE GENEROUS ENCOURAGEMENT HAS AIDED EVERY EFFORT FOR THE
MECHANICAL AND ARTISTIC ADVANCEMENT OF
AMERICAN HARDWARE,
WITH THE PREVIOUS PERMISSION OF SOME,
AND IN THE HOPE THAT IT MAY BE USEFUL TO ALL,
THIS BOOK IS DEDICATED
BY
THE AUTHOR.

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43 AND 45 EAST NINETEENTH STREET, NEW YORK.

PRICE, . . . \$3.00.

PREFACE.



WIDE acquaintance with members of the architectural profession, and a long familiarity with their wants in the field of Builders' Hardware, both as to the product itself and as to information pertaining to it, is the excuse for offering this combined Hand Book of technical information and ready-reference Catalogue of Locks and Hardware; an experience of over thirty years as a manufacturer may serve as a justification for attempting what the volume aims to accomplish.

Its matter and arrangement will speak for themselves. The author's share of the work has been done during the intervals of a busy life, as occasion permitted. A most valuable feature is the series of articles on the Schools of Ornament by Mr. W. W. Kent, architect, while additional articles of interest are from the pens of other qualified writers. To the intelligent assistance of Mr. C. S. Redfield is due the credit of compilation, arrangement and general supervision of the work. The volume as a whole sets forth, more completely than any previous publication, the development and achievements of an industry which can justly claim a prominent place in the Building Trades, which in its latest phase has boldly and successfully entered the domain of Art, and which, to an exceptional degree, is typical of American ingenuity, skill and progress.

For the proper exposition of the subject of Builders' Hardware, especially in its practical relation to the work of the architect, it became necessary to refer, specifically and in detail, to concrete examples of the product it embraces. To have omitted all such reference would have made the volume of little practical value; to have selected diverse examples from the product of various manufacturers would have been confusing, illogical and contrary to actual practice; if the product of one establishment was to be used for purposes of illustration it was expedient that the author should avail of the one with which he is most familiar. Therefore he has not hesitated to avail frankly of the product of the works operated under his management.

If it serves in any degree to promote a broader appreciation of the comprehensive product of which it treats, to facilitate the intelligent use thereof by Architects and their clients, and to enlarge the technical knowledge of Builders and Dealers, this volume will have accomplished the purposes for which it is intended.

HENRY R. TOWNE.

*New York, 121 Madison Ave.,
November, 1904.*

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Introductory.

THE PURPOSE AND ARRANGEMENT OF THE BOOK EXPLAINED.

Builders' Hardware.

American usage has adopted the term "Builders' Hardware" to designate that large group of metal products, used in buildings, which relates to *protection, convenience* and *decoration*, as distinguished from the heavier and simpler material of construction, such as columns and beams, or nails and screws.

The former usually is, and always should be, reserved for careful and personal selection by the architect, alone or in conjunction with his client, while the latter is furnished by the contractor in conformity with the general specifications.

Protection.

The primary function of Builders' Hardware is to supply proper and convenient fastenings for doors and windows, whereby at will they may be closed so as to secure protection and privacy.

Hence, Locks, in their many diverse forms, become the natural basis of the line of products designated as Builders' Hardware, and constitute its most important element, although Bolts, Catches, Sash Fastenings and other fastening appliances are equally necessary.

Convenience.

The next requirement is that these articles, in addition to affording protection, shall be convenient in use, and a vast amount of ingenuity has been devoted to this end with the result that American hardware, to a marked degree, is characteristic of the national skill in adapting means to ends, especially in the field of applied mechanics.

Decoration.

The final requirement, that the articles which are visible shall not only harmonize with their surroundings but shall also constitute an element in the general scheme of decoration, is one which, although only intelligently recognized by us since 1876, is now more completely attained by American hardware, especially that made by the leading manufacturers, than by the corresponding product of any other country. This statement is made unqualifiedly and covers the most creditable, as it is the latest, achievement of the industry concerned.

**Division
of subject.**

The three essentials of good hardware, which we have thus briefly indicated, are so interwoven and interdependent as to preclude their further separate consideration, except only as to the element of decoration, and our further discussion of the subject will of necessity divide itself on other lines.

While the Table of Contents (page 5) shows the sequence and subjects of the several Parts, a few words of explanation as to the general plan which has been adopted may also be helpful.

PART I. (page 38), which is preceded by a Glossary of the Technical Terms used to designate the component elements of Builders' Hardware, is chiefly "Narrative and Historical," and consists of a series of articles, written by the author, or by others at his instance, descriptive of the development of the industry in the United States; of the principles which underlie the correct designing, selection and use of Art Metal Work; of the origin, growth and facilities of a leading industrial works, one of the largest of its kind in the world, devoted to the production of Builders' Hardware; and, finally, of a historical sketch of the general subject.

PART II. (page 104), relates to the "Mechanics of Hardware," beginning naturally with Locks, which subject is exhaustively discussed in all of its many phases, after which follow briefer explanations of the mechanical characteristics of other articles of Builders' Hardware, intended to promote a better understanding of their-kinds and variations, and to assist in the intelligent selection of those best adapted to meet the varying conditions of actual service.

PART III. (page 226) deals chiefly with the subject of "Art-Metal Work and Ornament," for the reason that, as the element of decoration is involved in the greater part of the product under review, it is desirable to have a clear understanding of this phase of the subject before proceeding to the discussion of mechanical details.

The principal feature of this part is a series of original papers prepared, at the author's request, by Mr. W. W. Kent, Architect, on the subject of "The Schools of Ornament," and intended to assist in a better understanding of the origin and characteristics of the various types of accepted ornamentation.

To avoid repetition, and also because believed to be most convenient for practical purposes, each of these papers has appended to it a classified list of available examples of hardware in the School to which it relates, this section thus combining practical or working data with historical and narrative matter.

Sundry short articles are added relative to various phases of Art Metal Work, in order to complete the discussion of this part of the general subject.

This Part also treats of Finishes, that is of the various effects obtained by the use of different metals, by diverse mechanical operations and by chemical manipulation, where-

by a great variety of surface, texture and color is obtained, according to the character of the article or its intended use.

PART IV. (page 614). Having thus covered the historical and explanatory portions of the subject, this Part takes up in detail a complete line of "Builders' Locks," and indicates as to each, its size, action, use and approximate price; following which, in Part VI, is similar information concerning a full general line of "Builders' Hardware," these Parts thus constituting, (together with the complementary data in Part III relating to Ornamental Hardware,) a complete working catalogue from which the architect can make selection and frame a specification for the hardware for any building.

PART V. (page 680), explains the manner of ordering "Locks in Sets," and illustrates, describes and prices Locks for all purposes complete with Plain and Ornamental trim.

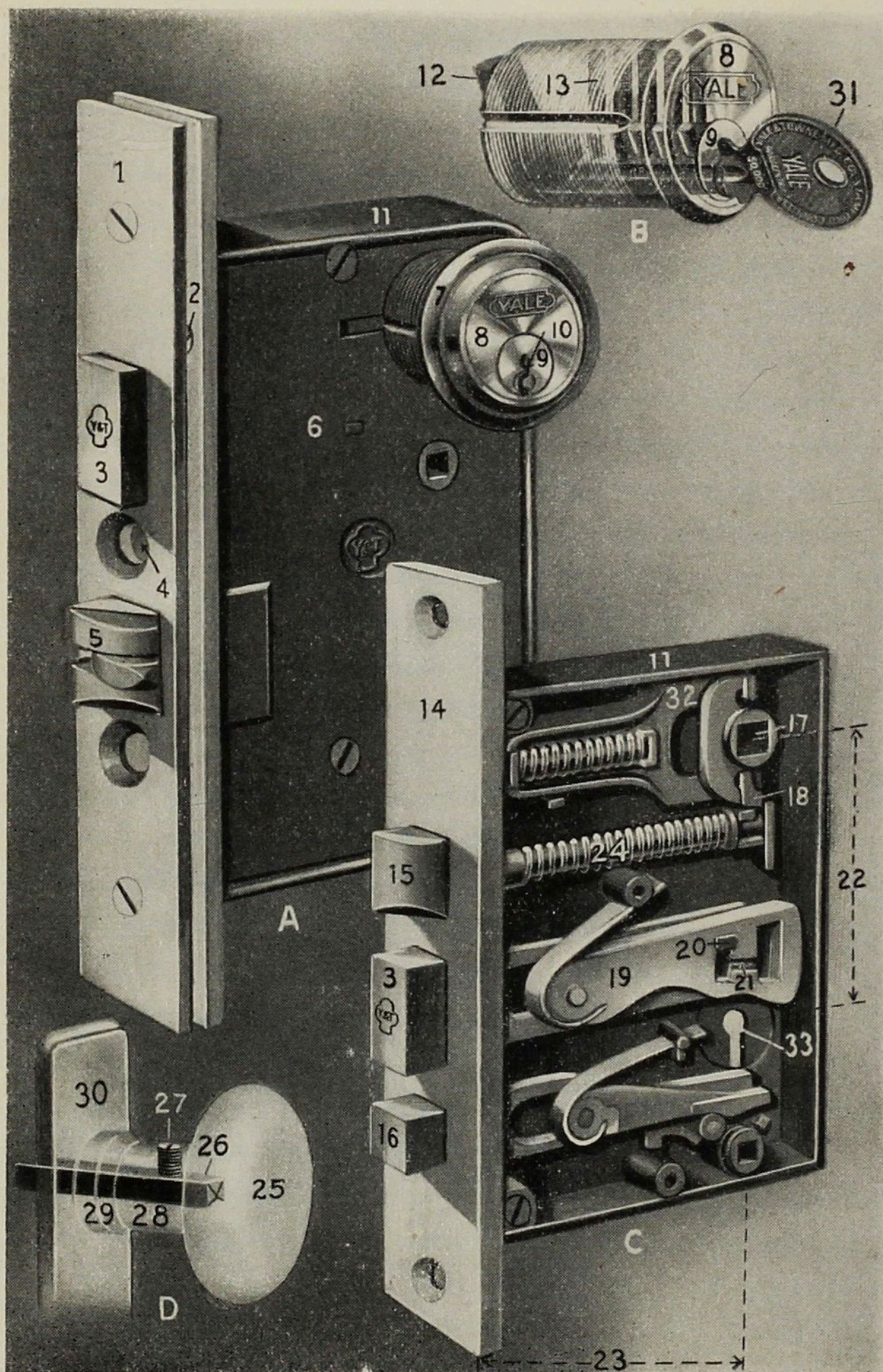
PART VI. (page 762), illustrates, describes and prices a line of Plain Hardware.

PART VII. (page 822), is devoted to illustrating important Groups of Plain and Ornamental Hardware.

PART VIII. (page 962), shows an extensive line of Ornamental Hardware for Cabinet Work.

PART IX. (page 994), contains Specifications and Instructions for the ordering of Hardware, and gives explanations on this subject which will be found useful to the Architect and Builder, and conducive to the avoidance of misunderstandings and delays in the execution of orders.

PART X. (page 1058), contains "Miscellaneous Information" germane to the general subject.



Builders' Locks and their Details.

For definitions see Glossary.

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Glossary

OF TECHNICAL TERMS RELATING TO LOCKS AND HARDWARE.

Accuracy in Language Promotes Accuracy in Business.

- ADJUSTABLE KEY**—A key for sliding door locks, having a stem or shank adjustable as to its length to adapt the key to doors of various thicknesses. See page 650.
- ANTI-FRICTION AXLE PULLEY**—A sash pulley the axle of which is carried in roller bearings to reduce the friction. See Sash Trim, page 181.
- ANTI-FRICTION BOLT**—A latch-bolt of a lock, when provided with a device for diminishing the sliding friction of the bolt during the closing of the door. See page 10, piece 5.
- APARTMENT HOUSE LETTER BOX**—A box for mail combined with a speaking tube mouth-piece, and an electric push button; used in vestibules of apartment houses. See page 800.
- ARMORED FRONT**—A construction in which the regular front of a cylinder lock is covered by an armor plate, secured to the regular front by machine screws to guard the set-screw which checks the cylinder, and also to protect the front of the lock while the door is being painted, or while the lock is being mortised. This latter result is effected by removing the armor plate from the front of the lock during these mechanical processes. See page 10, piece 1.
- ASTRAGAL**—A molding usually half-round, applied to the abutting edges of a pair of double or folding doors to break and cover the joint. See page 166, Fig. 8, and page 650.
- ASTRAGAL FRONT**—A lock front having a form coinciding in shape with the edges of a door having an astragal molding. See Astragal.
- ASTRAGAL STRIP**—A molding applied to the *surface* of one of a pair of doors, at the edge which abuts against the other door, in order to conceal the joint. See page 166, Fig. 8.
- ASYLUM LOCK**—One for use on doors of insane asylums and especially protected against tampering. See Asylum Locks, page 218.
- AXLE PULLEY**—Synonymous with Frame Pulley, page 20; also see Sash Trim, page 181, Fig. 2.

- BACK FLAP**—Synonymous with Shutter Flap. See Shutter Trim, page 189.
- BACK PLATE**—A plate on the inside of a door and surrounding the orifice leading from a letter drop or plate on front of door. See page 797.
- BACKSET**—(of a lock) —The offset or horizontal distance from the front of a lock to the center line of its knob or key-hole. See page 10, piece 23.
- BALL-BEARING BUTT**—One having a roller or ball bearing to reduce the friction. See Butts, page 173.
- BANK LOCK**—A generic term, covering locks of every kind adapted for use on safes and vaults. Specifically, one for use on burglar-proof safes in contradistinction to those intended only for fire-proof safes. See Bank and Safe Locks, page 220.
- BARN DOOR HANGER**—A sheave mounted in a frame or attachment to the bottom of a sliding barn door, traveling on an overhead rail and carrying the door.
- BARN DOOR LATCH**—A heavy Thumb Latch.
- BARN DOOR PULL**—A large Cupped Pull for heavy doors.
- BARN DOOR ROLLER**—A sheave mounted in a frame for attachment to the bottom of a sliding barn door, traveling on a rail laid in the floor, and carrying the door.
- BARN DOOR STAY**—A small roller, usually carried on a spike or screw, for guiding a sliding barn door.
- BARREL BOLT**—A cylindrical bolt mounted on a plate having a case projecting from its surface to contain and guide the bolt. See Door Bolts, page 179, Fig. 1; also page 763.
- BARREL KEY**—Synonymous with Pipe Key. See Keys, page 139, Fig. 4.
- BAR HANDLE**—A door handle consisting of a bar, usually horizontal, supported by one or more projecting brackets. See page 846, No. 147.
- BELL CRANK**—A bent arm, usually a right angle, turning on a pivot attached to a plate, used for altering the direction of bell wires.
- BELL LEVER**—See Lever Bell Pull, page 24.
- BELL PULL**—A knob, with plate, arranged to pull out longitudinally against the resistance of a spring, its motion being transmitted through wires to a bell. See page 763, No. 1255.
- BEVEL OF LOCK**—A term used to indicate the direction in which the bevel of the latch bolt is inclined; "regular bevel" commonly indicating a lock for use on a door opening inward, and "reverse bevel" one for a door opening outward. See Hand and Bevel of Doors, page 165, Fig. 6.
- BEVEL OF LOCK FRONT**—The angle of the front of a mortise lock when inclined at other than a right angle to the case, to conform to the angle of the edge of the door. See Hand and Bevel of Doors, page 165.

- BEVEL OF DOOR**—The angle of front edge of door. Regular bevel is usually $\frac{1}{8}$ inch to $2\frac{1}{4}$ inches. See *Hand and Bevel of Doors*, page 165, Fig. 5.
- BIT** (of a key)—A projecting blade which engages with and actuates either or both the bolt and tumblers of a lock. Synonymous with *Wing*. See *Keys*, page 139.
- BIT-KEY LOCK**—One operated by a key having a *Wing Bit*. See *Lock Primer*, page 105.
- BITTING**—A cut, or indentation, on that part of a key which acts upon and sets the tumblers. See *Lock Primer*, page 105.
- BOLT**—A bar or barrier arranged to secure a door or other moving part, and to prevent its opening. See *Door Bolts*, page 179; also pages 763 to 771.
- BOOKCASE BOLT**—One which automatically fastens or releases one half of a bookcase door when the other half of the door is closed or opened. See *Minor Fastenings*, page 197 Fig. 7, and page 784.
- BOSTON SASH FAST**—A type of *Sash Fast* in which the rotating locking bar is held in the locked position by a trigger or thumb-piece, pressure on which permits the bar automatically to unlock. See page 184, Fig. 12; also page 806, No. 1372.
- BOTTOM BOLT**—One for use on the bottom of a door and having frictional resistance whereby the bolt is prevented from falling into the locked position unless intentionally moved. See *Foot Bolt*, page 764.
- BOX LOCK**—See *Chest Lock*, page 677; also see *Cabinet Locks*, page 216.
- BOX OR SQUARE BOLT**—A square or flat bolt mounted on a plate having a case projecting from its surface to contain and guide the bolt. See *Door Bolts*, page 179, Fig. 2.
- BOX STRIKE**—One in which the aperture to receive the bolt is enclosed or boxed to prevent access from the rear. See *Strike*, page 31.
- BRACKET BEARING**—A knob-thimble or socket which, projecting like a bracket, supports the knob close to its head instead of at the end of the knob shank. See page 10, piece 29, also page 134.
- BUILDERS' LOCK**—One for use in house construction.
- BUTT**—(An abbreviation of the term *Butt Hinge*). A hinge intended for application to the butt or edge of a door, in contradistinction to a flat or strap hinge for application to the surface of the door. See *Butts*, page 173.
- CABINET LOCK**—One for use on cabinet work and furniture. See pages 216 and 674.
- CABIN DOOR HOOK**—A hook and its staple, each with a heavy plate for attaching. Used on shipboard to hold a door at either end of its swing.

- CAM**—A rotating piece whereby the rotary motion of a key or knob imparts reciprocating motion to the bolt of a lock. See page 10, piece 12.
- CANADA BOLT**—A box or other bolt the sliding bar of which is prolonged considerably beyond the back plate and provided with a separate guide near its other end.
- CAP (of Lock)**—The removable part or lid of a lock. Also called "cover." See page 10, piece 6.
- CAPPED BUTT**—One having on each leaf a cap which covers the fastening screws and is itself attached to the butt by one or more smaller screws.
- CARD PLATE**—A plate for use on doors or drawers and arranged to hold a label indicating contents. See Card Frames, page 792.
- CASE (of lock)**—The box containing the bolts and other mechanism. See page 10, piece 11.
- CASEMENT ADJUSTER**—A hinged or pivoted rod for moving and fastening the hinged sash of a casement or French window. See Casement Trim, page 188, Fig. 4, also pages 778 to 781.
- CASEMENT FASTENER**—A catch for fastening a casement or French window. See Casement Trim, page 188, Figs. 5 and 6.
- CASEMENT WINDOW**—One with hinged sashes, opening either in or out. See Casement Window Construction, page 1082.
- CEILING HOOK**—One for use in ceilings, or on the under side of a shelf, and usually having two prongs. See page 795.
- CHAIN BOLT**—One for application at the top of a door, and having a chain depending therefrom, whereby the bolt may be retracted against the resistance of a spring which tends to hold it in the locked position. See page 764.
- CHAIN DOOR FASTENER**—A heavy chain, one end of which is secured to a plate which may be attached to the edge of the door, the other end of the chain carrying a ball or hook, which may be inserted in a slot formed in another plate attached to the jam or other half of the door, whereby the door cannot be opened (except slightly) until the chain is released. See page 782.
- CHAIN PADLOCK**—One provided with a length of chain, whereby the lock may be attached to its staple, or to the adjacent work. See Padlocks, page 215.
- CHANGE KEY**—That key of a master-keyed lock which differs from all others of the same series, and will operate only its own lock (sometimes called room-key). Used in contradistinction to "master-key." See Master-keyed Locks, page 121.

- CITY LOCK**—A nearly obsolete term, used in New York City and vicinity; formerly indicating a superior grade of hand-made locks, but now usually applied to an inferior grade of rim and mortise locks with brass bolts and steel or brass keys.
- CLOSET KNOB**—A single knob on one end of a spindle, on the other end of which latter is a rose or plate to secure the knob and spindle to the door; for use on closet doors. See Knobs and Spindles, page 168.
- COAT AND HAT HOOK**—One with two or more projections, one of which is of sufficient length to receive a hat, the others being usually shorter. See page 794.
- COMBINED ESCUTCHEON PLATE**—One containing both a key-hole and a knob socket. See page 704.
- COMBINATION LOCK**—One having changeable tumblers actuated by a dial on face of door, permanently connected by a spindle with the lock mechanism. See Dial or Combination Locks, page 221, Figs. 2 and 3.
- COMBINATION TUMBLER**—A circular plate of metal, consisting of a central disk, containing the driving pin for communicating motion from one tumbler to the next, and an outer or annular disk, enclosing the central one, and containing the "gating," these two parts being variably adjustable in relation to each other, thus forming the permutation wheel or tumblers of a combination lock. (Also designated as "wheel"). See Dial or Combination Locks, page 221.
- COMBINED STORE DOOR LOCK**—One containing a heavy dead bolt and a latch bolt adapted to be operated by thumb handles instead of knobs. See Store Door Trim, page 159, and pages 664 to 666.
- COMMUNICATING DOOR LOCK**—One for use on doors between communicating rooms; usually a knob latch with thumb bolts. See Locks for Residence Use, page 147, also page 626, No. 1504.
- COMPENSATING HUB**—A lock hub having an elongated spindle-hole to compensate for the shrinking and swelling of a door and to prevent derangement of the lock from these causes. First introduced in the "Vulcan" locks. See page 10, piece 17; also see page 133.
- CONNECTING DOOR LOCK**—Synonymous with Communicating Door Lock. See Locks for Residence Use, page 147; also page 626, No. 1504.
- CORNER PLATE**—One similar to a finger or push plate, but having two arms, forming a right angle, and adapting it for application to the corner of a door. See Hinge, Corner and Kick Plates, page 207; also pages 847 to 872.
- CORRUGATED KEY**—A sheet metal key of uniform thickness and corrugated longitudinally. One having a sinuous cross-section, and not merely grooved on one or both sides. See Keys, page 140, Fig. 5.
- COTTAGE LATCH**—A small Lift Latch for use on cupboards and light doors. See Lift Latch, page 24.

- COVER**—See Cap, page 14.
- CRANK HANDLE**—Synonymous with Lever Handle, page 24.
- CREMORNE BOLT**—A fastening for casement or French windows arranged for application to the surface thereof, consisting of a sliding rod, engaging at top and bottom with strikes or plates in the window frame, and provided near its center with a handle or knob the rotation of which causes the upper and lower parts of the bolt to move in opposite directions in locking or unlocking, and sometimes provided with an additional horizontal bolt, also operating simultaneously, which serves further to secure the sash at or near its center. See Casement Trim, page 186, Fig. 2; also page 887.
- CUPBOARD BUTTON**—A small turning bar, adapted to secure a door. See Minor Fastenings, page 196, Fig. 3.
- CUP ESCUTCHEON**—A door plate, for use on sliding doors, having a recessed panel to afford finger-hold and to contain the knob, or its equivalent, and a key, all of the contained parts being flush with the surface of the plate in order to offer no obstruction to the movement of the door within its recess. See pages 706 and 904 to 915.
- CUPBOARD CATCH**—A small spring catch adapted for fastening a light door, and operated by a slide knob or thumb-piece. See page 196, Fig. 2; also page 782.
- CUPBOARD LOCK**—One designed for use on doors of cupboards, boxes, etc. See page 674, No. PA74.
- CUPBOARD TURN**—A small spring catch adapted for fastening a light door and operated by a rotating knob or handle. See Minor Fastenings, page 196, Fig. 1; also page 785.
- CYCLOID KNOB ACTION**—An arrangement of intergearing pivotal levers for transmitting motion from a lock hub to the latch bolt. First introduced in the "Vulcan Locks." See page 131, Figs. 6, 7 and 8.
- CYLINDER (of a lock)**—A short cylindrical case containing the key-hole and tumbler mechanism of a lock of the "Yale" type. Formerly called "Escutcheon." See page 10, Fig. B; also The Yale Lock page 71.
- CYLINDER LOCK**—One in which the key-hole and tumbler mechanism are contained in a cylinder or escutcheon separate from the lock case, as in the Yale Lock, the original lock of this type. See page 10, Fig. A; also Cylinder and Pin-tumbler Locks, page 137.
- CYLINDER RING**—A rose, or washer, placed under the head of a cylinder (of the Yale type) to enable a long cylinder to be used on thin doors. Also called Rose. See page 10, piece 7.

- CYLINDER SCREW—The set-screw in the face of a Yale mortise lock for preventing the unscrewing of the cylinder. See page 10, piece 2. (Also called set-screw).
- DEAD BOLT (of a lock)—One having a square head, and moved positively by the key in both directions. See page 10, piece 3.
- DEAD LATCH—Synonymous with Night Latch, page 25. See page 615, No 42.
- DEAD LOCK—One having a dead bolt only. See page 617, No. 702.
- DESK LOCK—One adapted to secure the rolling or hinged lid of a desk. See page 678, No. S250, and page 676, No. S230
- DETACHABLE KEY—One so constructed that the bits, or portion which actuates the tumblers, may be detached from the shank or handle of the key for convenience in carrying. Formerly much used with bank locks requiring large and heavy keys.
- DIAL LOCK—Synonymous with combination lock, and now more generally used. See Dial or Combination Locks, page 221.
- DIRECTION PLATE—One giving information concerning the purpose of the door or opening on which it is used. See Signs, page 811.
- DOOR BOLT—A sliding rod or bar, suitably mounted for attachment to a door and adapted to secure it. See pages 179 and 763.
- DOOR CHECK—A device for preventing the slamming of doors provided with springs. Frequently used as synonymous with "Door Check and Spring." See pages 201 and 787.
- DOOR CHECK AND SPRING—A device combining, in one structure, a door spring and a check to prevent slamming of the door. See pages 201 and 787.
- DOOR HOLDER—A device for fastening a door in an open position. See page 206, Figs. 7 to 10, and Door Stops, pages 789 and 790.
- DOOR PULL—A bent handle usually mounted on a plate, and adapted for attachment to the surface of a door. See pages 823 to 846.
- DOOR STOP—A device to limit the swing, or movement of a door when open. See page 206, Figs. 7 to 10, and pages 789 and 790.
- DOUBLE-ACTING BUTT—One which permits a door to swing in both directions. See Double-acting Hinges, page 199.
- DOUBLE-ACTING SPRING HINGE—One having a double set of Springs opposed to each other, and each tending to move the door into the closed position, the hinges being so constructed as to permit the door to swing in either direction. See page 199.

- DOUBLE-BITTED KEY**—One having bittings on both sides, whereby either or both wings or sides of the key may actuate the tumblers. See page 140, Figs. 9 and 10.
- DOUBLE DOOR BOLT**—One having two sliding bars, moving in opposite directions, to secure a door simultaneously at the top and bottom. See Casement Trim, page 185; also pages 766 to 768, and page 887.
- DOUBLE HUNG WINDOW**—One with two vertically sliding sashes.
- DRAWER KNOB**—A small knob suitable for use on drawers and cabinet work. See Metal Knobs, pages 940 to 943, and Glass Knobs, pages 947 to 951.
- DRAWER LOCK**—One adapted for use on drawers. (Also known as a Till Lock.) See page 675.
- DRAWER PULL**—A handle or grip adapted to receive the fingers. See pages 925 to 939.
- DRILL PIN**—A round pin projecting from the back plate of a lock and fitting into a hole in the end of the key. See page 674, Lock PA74.
- DROP ESCUTCHEON**—An escutcheon or key-plate provided with a pivoted drop covering the key-hole. See page 958, Figs. 50 and 58.
- DROP DRAWER PULL**—A pull or handle pivoted at its ends to its attaching plate. See pages 929 to 936.
- DROP HOOK**—Synonymous with Shutter Bar. See pages 189, Fig. 3, and pages 812 and 922.
- DROP KEY**—One having a bow, or handle, pivoted to the shank, so that it may drop or fall parallel with the surface of the door. See pages 650 and 651.
- DROP KEY PLATE**—One having a swinging cover, or drop, to protect the key-hole. See page 958, Figs. 50 and 58.
- DRUGGIST'S DRAWER PULL**—A drawer pull combined with a plate to contain a label. See page 939, Figs. 125 and 126.
- DUMB WAITER PULLEY**—A heavy Axle Pulley for use with dumb waiters.
- DUPLEX LOCK**—A master-key lock of the cylinder type, such as the Yale Lock, provided with two cylinders on the same side, both acting on the same bolt, but each controlled by a different key, whereby, when used in a series, one of said cylinders, may be operated by the master-key which passes every lock in the series, and the other by a change key, which may be different for each lock throughout the series. See pages 667 to 669.
- DUTCH DOOR BOLT**—One for locking together the upper and lower halves of a Dutch Door. See Dutch Door Trim, page 145.

- EASY SPRING**—A term used to designate the construction of a knob lock in which two springs are employed, one of which (the easy spring) acts only on the latch bolt, while the other acts directly or indirectly on the knob spindle. Motion of the latch bolt is opposed by the easy spring, while both the springs give resistance to rotation of the knobs, thus giving a lively action to the knobs while permitting the door to close easily. The same action may also be obtained with a single spring if suitably connected with the related parts of the lock. See page 10, piece 24.
- ELBOW CATCH**—A pivoted fastening for cupboard doors, one end having a hook to engage with a strike or staple and the other end bent to a right angle to form a handle for releasing the catch. See page 197, Fig. 6; also page 784.
- ELEVATOR LATCH**—A bolt consisting of a pivoted arm carried by a plate on a door and engaging with a strike or hook on the jamb. See page 648, No. P1902½.
- ELEVATOR LOCK**—One for use on doors of elevator shafts; usually operated by a key from outside and by a flush lever handle from the inside. See page 648, No. 1792.
- ESCUTCHEON**—Generically a plate containing a key hole. See page 10, piece 30; also page 704.
- ESCUTCHEON KNOB**—A door knob containing a key escutcheon, the latter actuating the lock or controlling the rotation of the knob. (Used chiefly with Asylum Locks.) See page 218.
- ESCUTCHEON PLATE**—A plate, whether plain or ornamental, either with or without key-hole opening, containing a knob socket, and adapted for attachment to the surface of a door. Page 10, piece 30, also page 704.
- ESPAGNOLETTE BOLT (or Bar)**—A fastening for casement of French windows, arranged for application to the surface thereof, consisting of a rotating rod extending from top to bottom, with hooks at each end which engage with pins or plates in the window frame when the bar is rotated, and having a hinged handle near the center whereby the bar may be rotated to fasten or release the sash and which also engages with a strike or keeper which holds the bar in the locked position and further secures the sash near its center. See Casement Trim page 187, Fig. 3; also page 887.
- EXTENSION BOLT**—A flush bolt having a short plate to receive a knob or thumb piece, which latter is connected at the bolt end at top or bottom of door by an extension rod inserted through a hole bored in thickness of door. See Door Bolts, page 179; also pages 765 to 768.
- EXTENSION KEY**—Synonymous with Adjustable Key, page 11.
- FAN LIGHT**—A semi-circular transom light, (improperly used as synonymous with transom light). See Transom Trim, page 195.

- FAST JOINT BUTT**—One in which the hinge pin is riveted, or otherwise secured, and the two parts of the butt permanently fastened together. See Butts, page 173 ; also pages 774 to 775.
- FENCE**—A projecting portion of a lock, usually attached to the bolt, which engages with the tumblers, and enters or passes through the “gating” of the tumblers when the bolt is retracted. See page 10, piece 20.
- FINGER PLATE**—A plate for attachment to a door to prevent soiling of its surface by handling. Synonymous with Push Plate. See pages 802 and 923.
- FIRE-PROOF SAFE LOCK**—A bank lock, for use on safes proof against fire, but not against burglars, the chief difference being in the construction of the lock spindle to resist attack. See Bank and Safe Locks, page 220.
- FLAT KEY**—A thin flat key, made of sheet or plate metal, usually by stamping. Sometimes provided with longitudinal grooves or indentations on one or both sides. See Keys, page 139.
- FLOOR HINGE**—A pivot door hinge, arranged to be set in the floor, and usually combining with the hinge a door spring and frequently also a door check. See Double Acting Hinges, page 200, Fig 2.
- FOLDING KEY**—One having a handle and a blade or shank, hinged together, the blade folding into the handle like a jack knife.
- FLUSH BOLT**—A door bolt mounted behind a plate adapted to be attached to and let into the surface of a door. See Door Bolts, page 179, also pages 769 and 770.
- FLUSH CUPBOARD CATCH**—One which is half mortise, i. e., let in flush with face of door. See Minor Fastenings, page 196, Fig. 2.
- FLUSH PLATE**—A door plate of any kind intended to be let into the wood flush with its surface.
- FLUSH RING**—A flush drawer handle of circular form. See page 939, Figs. 121 and 124.
- FLUSH RING CUPBOARD CATCH**—One with a flush ring in place of a knob for actuating the bolt. See page 782, No. 1481.
- FOOT BOLT**—A spring bolt for the bottom of a door which, when retracted, is retained by a trigger, the release of which latter permits the spring to shoot the bolt into the locked position. See page 764.
- FRAME PULLEY**—A box containing a sheave, and adapted to be mortised into a window frame for carrying the sash cord. See page 181, Fig. 2 ; also page 791.
- FRENCH ESCUTCHEON**—A small circular key-plate containing a key-hole secured by driving or screwing into the wood.

- FRENCH HARDWARE**—A term used to designate rim locks and bolts of ornamental character, as used in French construction. See pages 589 to 594.
- FRENCH WINDOW**—One mounted on hinges like a door; a casement window extending to the floor. See Casement Window Construction, page 1082.
- FRENCH WINDOW LOCK**—A mortise knob lock with small backset, for use on French windows or doors with narrow stiles. See pages 632 and 633, Nos. 1640 to 1645.
- FRONT (of lock)**—The face plate of mortise lock through which the ends of the bolts are projected. See page 10, piece 14.
- FRONT DOOR LOCK**—A lock for use on entrance doors, having a dead-bolt and a latch-bolt; the former controlled from the outside by a key and from the inside by a key or knob; the latter controlled from the outside by a key and from the inside by a knob. Usually provided with "stop work" whereby the outside knob may be set to actuate the latch-bolt or not, as desired. See page 10, Fig. A, also page 142.
- GATING**—The opening in the tumbler of a lock into or through which the "fence" passes to release the bolt or permit of its movement. See page 10, piece 21.
- GRILLE**—An ornamental screen of open metal work, wrought or cast. See page 163 showing Grille on Door.
- GUARDED FRONT AND STRIKE**—A construction of these parts of a lock such that they may interlock, so as to protect the latch-bolt from attack through the crevice between the door and jamb. Chiefly used in Insane Asylums. See pages 672 and 673.
- GUARD LOCK**—One which guards or checks another lock; especially that part of the mechanism of a safe deposit lock which is controlled by the attendant's key, and which checks or guards the other part of the mechanism controlled by the renter's key. Also applied to a separate lock adapted to guard or cover the key-hole. See page 222.
- HAND (of locks, etc.)**—A term indicating whether the article is adaptable to either a right hand or left hand door. See Handle and Bevel of Doors, page 165.
- HANDED**—A term indicating that the article is adaptable to either a right or a left hand door, but not both.
- HANGING STILE**—That stile of a door to which the hinges are attached by which the door is hung.
- HALF-RABBETED LOCK**—A mortise lock, the front of which is turned into two planes, at right angles, thus adapting it to use on a door with rebate on edge. One having a front in two planes forming a single right angle.

- HASP LOCK**—A prison lock permanently attached to the hasp of the door, and adapted to secure the same when in a closed position.
- HINGE**—A pair of jointed plates, attached respectively to a door and its frame, whereby the door is supported and is enabled to swing or move. See Butts, page 173 and pages 772 to 777 and 918 and 919.
- HINGE PLATE**—Synonymous with Hinge Strap.
- HINGE STRAP**—A plate, usually ornamental, adapted for attachment to the surface of a door, fitting at one end against the knuckle of a butt, and intending to give the effect of a strap hinge. See pages 847 to 866.
- HORIZONTAL LOCK**—One whose major dimension is horizontal. See page 626, No. 1404.
- HOT HOUSE PULLEY**—A *rim* axle pulley; mounted in a projecting frame or box and intended to be applied to the surface of a window frame or wall instead of being mortised therein.
- HOTEL LOCK**—A master-keyed knob lock. See pages 151 and 641 to 644; also pages 699 and 727.
- HUB**—A rotating piece within a lock, containing a central aperture to receive the knob spindle and engaging with the bolt or tail piece in the lock whereby the motion of the knob is communicated to the bolt. See page 10, piece 17.
- INSIDE DOOR LOCK**—Synonymous with Room Door Lock, page 28.
- INSTANT LOCKER**—A term applied to a time lock constructed to lock automatically, by spring action, upon the closing of the door.
- JAMB LOCK**—A prison lock designed to be built into the masonry of the door jamb, the bolt when locked being projected from the jamb and engaging with the door. See Prison Locks, page 219.
- JAM JOINT**—A joint used on the abutting of edges of French sashes, in which the edge of one sash is convex and of the other concave to a radius equal to one-half the thickness of the sash, the purpose being to form a weather tight joint. See Casement Window Construction, page 1082.
- JANUS-FACE LOCK**—A rim lock both sides of which are similarly molded or ornamented, so that either side may be applied to the door, thus making the lock both right and left hand.
- KEY-CHANGING LOCK**—A lock actuated by a key, the bits and combination of which are changeable at pleasure.
- KEY HOLE**—The opening in a lock, or the door to which it is fitted, for the insertion of the key. See page 10, piece 33.
- KEY-PLATE**—The plate, either plain or ornamental, having one or more key-holes (but no knob socket), and adapted for attachment to the surface of a door. See pages 952 to 960.

- KEY-WAY**—The aperture, in locks of the Yale type, which receives the key and engages closely with it throughout its length, as distinguished from the open key-hole of a common lock. See page 10, piece 10.
- KICK PLATE**—A plate for protecting the surface of a door, and adapted to be applied at or near its bottom. See pages 801 and 870.
- KNEE BUTT**—Synonymous with Pocket Butt. See page 773, No. 60.
- KNOB**—A projecting handle, usually round or spherical, for operating a lock. See page 10, piece 25.
- KNOB BOLT**—A door lock, the bolt of which is controlled by a knob or thumb piece from either or both sides of the door, (not one actuated by a key). See page 631, No. P2205.
- KNOB LATCH**—A door lock having a spring bolt operated from either or both sides of the door by a knob (not one actuated by a key) See page 622, No. P2200.
- KNOB LOCK**—A door lock having both a spring bolt, operated by a knob, and a dead bolt, operated by a key; (a knob lock thus combines in one structure a knob latch and lock). See page 637, No. 1420.
- KNOB ROSE**—A round plate, or washer, forming a knob socket, and adapted for attachment to the surface of a door. See Knobs and Spindles, page 168, also pages 708 and 709.
- KNOB-SHANK**—The projecting stem of a knob, containing the hole or socket to receive the spindle. See page 10, piece 28.
- KNOB-TOP**—The upper and larger part of a knob, that which is grasped by the hand; usually made of porcelain, glass or wood, or, in the better class of knobs, of metal. See page 10, piece 25.
- KNUCKLE**—The enlarged part of a hinge or butt which receives and encloses the hinge pin. See Butts, page 173.
- LATCH**—A lock, the bolt of which is beveled and is self-acting by the pressure of a spring or by gravity. See page 615, No. 42.
- LATCH-BOLT** (of a lock)—One having a beveled head, and actuated by a spring, whereby it is retracted by impinging against the strike, and is automatically thrown forward again by the spring. See page 10, piece 15.
- LETTER BOX BACK**—Synonymous with Letter Box Hood. See page 917, Figs. 2, 4, 6, 8, etc.
- LETTER BOX CHUTE**—A lining for the opening through a door behind a letter hole plate; usually inclined downward; sometimes combined with a hood or back-plate on rear of door.
- LETTER BOX HOOD**—A plate for attachment to the rear of a door to conceal the opening through the door from a letter plate and to direct letters downward. See page 917, Figs. 2, 4, 6, 8, etc.

- LETTER DROP PLATE**—One containing an opening, usually closed by a drop or flap, to permit the passing of letters. See pages 797 and 917.
- LEVER**—An abbreviation of the term “Lever Tumbler” (see below), and inaccurately used as synonymous with Tumbler. See page 10, piece 19 and Lock Primer, page 105. Fig. 4.
- LEVER BELL PULL**—One actuated by lever action in place of by drawing out of knob. See Bell Pull, page 12.
- LEVER CUPBOARD CATCH**—One consisting of a lever pivoted on a plate, through which it passes, its inner end having a hooked form to engage with a staple, and its outer end formed into a knob or handle. See Minor Fastenings, page 198, Fig. 12.
- LEVER HANDLE**—A bent handle for actuating the bolt of a lock and used in the place of a knob. See page 1074; also pages 793, 878 and 879.
- LEVER TUMBLER**—A lock tumbler having a pivotal action. See Tumbler, page 32A; also page 10, piece 19, and page 105, Fig. 4.
- LIFT LATCH**—An unencased rim latch consisting of a bar pivoted to a plate and engaging with a hook on the jamb, the bar being operated by thumb-piece on the outside of the door and by a lift handle on the inside; usually combined with a door pull on one or both sides of the door. See page 742, Fig. 29.
- LOCK**—Generically, a fastening of any kind operated by a key. Specifically, one having a dead bolt, as distinguished from one having a spring latch-bolt. See Lock Primer page 105, also page 10, Figs. A and C.
- LOCK RAIL** (of a door)—A rail located at the proper height to receive the lock, and usually made broader for that purpose.
- LOCK-SET**—A lock combined with its trim, i. e., complete with knobs, escutcheon plates and screws. See Lock Trim and Lock-sets, page 161, also Locks in Sets, page 680.
- LOCKER RING**—A pull, for mortising into the edge of a sliding locker door, consisting of a plate containing a ring which may be pushed back flush with the plate or pulled forward for use as a pull to open the door.
- LOOSE JOINT BUTT**—One having a single knuckle on each half, one of them containing the pin and the other a corresponding hole, whereby the two parts of the butt can easily be separated. See Butts, page 173, also page 774.
- LOOSE PIN BUTT**—One having a hinge pin which can be withdrawn to permit the two parts of the butt to be separated. See Butts, page 173, also pages 776 and 919.
- MASTER-KEY**—(sometimes called pass-key)—The key pertaining to a series of master-key locks which will actuate any and all of the locks. See Master-Keyed Locks, page 121.

- MASTER-KEYED LOCK**—One intended for use in a series, each lock of which may be actuated by two different keys, one capable of operating every lock of the series, and the other capable of operating only one or a few of the locks. See page 121.
- MEETING RAIL**—The horizontal rail of a sliding sash which meets with the corresponding rail of the other sash to form a joint between the two sashes when closed. See page 184, Fig. 10.
- MORTISE BOLT**—A door bolt designed to be mortised into a door, instead of being applied to its surface. See *Minor Fastenings*, page 197, Fig. 9; also pages 631 and 632.
- MORTISE LOCK OR LATCH**—One designed to be mortised into the edge of a door; not applied to its surface. See page 10, Figs. A and C.
- NAME PLATE**—One containing a name, as for front door use; also applied to a plate containing the name, address and business of the maker of a machine or other article to which the plate is attached. See *Signs*, page 811.
- NECKED BOLT**—A bolt the projecting end of which has a bend or offset to engage with a strike or keeper not in line with the body of the bolt. See page 763, No. 290.
- NIGHT KEY**—That one of the two keys of a front door lock which controls the night work and operates the latch-bolt. See *Front Door Lock*, page 142.
- NIGHT LATCH**—A door lock having a spring-bolt which cannot be operated from the outside except by a key. See page 615, No. 42.
- NIGHT WORK**—A term used to indicate that part of the mechanism of a front door or vestibule lock which controls the latch-bolt, and is actuated by the night key. See *Front Door Lock*, page 142.
- NOSE PLATE**—A small plate surrounding the nose or escutcheon of a cylinder lock. See page 676, No. S230.
- OFFICE LOCK**—An arbitrary term applied to a knob lock (which see) of *inverted* form, i. e., with key-hole above knob, and especially designed for use on office doors. See pages 156 and 645 to 647.
- PADLOCK**—A detachable lock, with a shackle or link, adapted to engage with a staple. See page 215.
- PARACENTRIC**—An arbitrary term adopted by the makers of the YALE LOCK to designate a peculiar form of key and key-way, the cross section of which shows ribs projecting from opposite sides of the key-way *past its center line*, and extending longitudinally throughout its length, thereby preventing the use of picking tools; the opposite sides of the key being grooved to correspond with the contour of the key-way, and the key and key-way thus being interlocked throughout their length. See page 10, piece 31; also *The Yale Lock*, page 71.

- PARLIAMENT BUTT**—One having T-headed leaves, usually broad. See page 774, No. 260.
- PASQUIL LOCK**—One for the rolling or sliding tops of desks, which resembles a horizontal Cremorne bolt, in having two sliding bolts, moving in contrary directions, and engaging at each end of the lid or top with the frame of the desk, and controlled by a locking mechanism in the centre. See page 678, No. S250.
- PERMUTATION LOCK**—A term formally applied to a lock having changeable tumblers, whether actuated by a key or by a dial. See Dial Locks, page 221, Figs. 2 and 3.
- PIN TUMBLER**—A small sliding pin actuated by the key, and dogging the plug or key-hub, by which motion is transmitted to the bolt, as, for example, in a Yale Lock. See page 10, piece 13; also The Yale Lock, page 71.
- PIPE KEY**—A round key having a hole drilled into its end to fit over a drill pin in the lock. Used chiefly for cabinet locks. Synonymous with Barrel Key. See Keys, page 139, Fig. 4; also pages 106, Fig. 6, and 674, No. PA74.
- PLATE ESCUTCHEON**—Synonymous with Key Plate. See pages 952 to 960.
- PLUG** (of a lock)—A cylindrical piece containing the key-hole and rotated by the key to transmit motion to the bolt. See page 10, piece 9; also The Yale Lock, page 71.
- POCKET BUTT**—A hinge or butt, for three-ply inside shutters, each leaf of the butt being bent at a right angle near its center; for use on the third leaf of the shutter to permit the latter to enter and leave its *pocket* without jamming. See page 773, No. 60.
- PRISON LOCK**—One designed for use on cell doors, and operated by the key from one side only. See page 219.
- PULL DOWN HANDLE**—A light handle for attachment to the under side of the bottom rail of upper sashes for use in moving the latter. See Sash Trim, page 182, Fig. 7.
- PULL DOWN HOOK**—Synonymous with Sash Hook. See page 804, No. 1359.
- PUSH BUTTON**—A small movable knob or button, within a socket, the movement of which actuates a bell, electrically or otherwise. See pages 895 to 903.
- PUSH BUTTON SWITCH**—A switch for controlling electric lights operated by two push buttons, one of which when pushed in makes, and the other breaks, the circuit. See Switch Plates, page 920.

- PUSH (or thrust) KEY**—One which performs its whole function of setting the tumblers by longitudinal motion without rotation.
- PUSH PLATE**—A plate for protecting the surface of a door against soiling and wear from handling. Frequently made with the word "Push" incorporated in the design. See pages 802 and 923.
- RABBETED LOCK**—A mortise lock, the front of which is formed with an offset or rebate conforming to the corresponding rebate on edge of door. One having a front in three planes, forming two right angles. See page 165; also page 659, No. 726R.
- RAIL (of a door)**—Any of the horizontal members which enclose the panels and which, with the stiles, constitute the frame work.
- REACH (of a Transom Lift)**—The distance from center of operating rod to the nearest edge of the transom sash. See Transom Trim, page 193 and 813.
- REBATE (also spelled Rabbet)**—The offset on the abutting edges of a pair of double doors. Also the corresponding offsets on the fronts and strikes of rabbeted locks. See page 166, Fig. 7; also page 659, No. 726R.
- RECESS (of a Transom Lift)**—The distance inward from the face of the door casing to the face of the transom sash. See Transom Trim, pages 193 and 813.
- REFRIGERATOR HINGE**—A surface hinge, usually of ornamental outline.
- REVERSE BEVEL (of latch bolt)**—A term used to indicate that the bevel of a latch-bolt (page 10, piece 15) is reversed, or inclined in the opposite direction to that which is regular. See Hand and Bevel of Doors, page 165.
- REVERSED**—A term applied to articles made of wrought or sheet metal with edges turned back to give the appearance of increased thickness. See W7000 Escutcheon Plates, page 705. For illustrations see page 704, Figs. 3 and 4.
- REVERSED DOOR**—One opening in the opposite direction to that which is usual or regular. Room doors if opening inward are "regular," if opening outward are "reversed." Cupboard doors are regular if opening outward. See Hand and Bevel of Doors, page 163.
- REVERSIBLE LOCK**—One in which the latch-bolt can be reversed to adapt the lock to a door of either hand. See page 167, and for construction of latch bolt see page 10, piece 15.
- RIM**—A term applied to articles of hardware intended to be applied to the *surface* of doors, windows, etc., in contradistinction to those intended to be mortised into the wood.

- RIM LOCK OR LATCH**—One which is applied to the surface of the door, not mortised into it. See example of Rim Lock page 615, No. 42.
- ROLL BACK**—A rotating piece within a lock, permanently attached to the knob-spindle, for transmitting motion to the bolt. Inaccurately used as synonymous with hub.
- ROOM DOOR LOCK**—A knob lock for doors leading from halls or corridors into rooms. Also called Inside Door Lock.
- ROSE**—A circular, square, or oblong plate for attachment to a door and containing a socket for supporting and guiding the shank of a knob. See page 168; also pages 702 and 703.
- ROUND KEY**—One having a round shank or stem. See Keys, page 139.
- SAFE DEPOSIT LOCK**—One for use on the iron doors of safe deposit boxes. See Bank and Safe Locks, page 220.
- SAFETY DOOR HOLDERS**—Synonymous with Door Holder, page 17.
- SASH ADJUSTER**—A swinging arm for adjusting and securing swinging sashes in any desired position. See Casement Trim, page 188, Fig. 4; also pages 778 to 781.
- SASH CENTER**—A pin or bearing for a transom light or other sash turning on a horizontal axis, consisting usually of a pair of plates, one carrying a pin and the other a socket, one plate intended for attachment to the sash and the other to the jamb or frame in which the sash is hung. See Transom Trim, page 194, Figs. 8 and 9; also page 805.
- SASH CHAIN**—A metal chain adapted for use with sliding sashes in place of a cord or rope.
- SASH CORD**—A small cord or rope used to connect a sliding sash with its counterweight.
- SASH CORD IRON**—A small casting inserted in the edge of a sliding sash to secure the end of the sash cord or chain.
- SASH FAST**—A fastening usually attached to the meeting rail of sashes, to prevent their being opened until released. See Sash Trim, page 183, Figs. 9, 10, 11, 12, also page 806.
- SASH HOOK**—A metal hook usually attached to one end of a wooden rod, and adapted to engage with a hole or socket in the upper sash, whereby the latter may be raised or lowered. See Sash Trim, page 183, Fig. 8; also page 804.
- SASH LIFT**—A plate, bar or hook, adapted for attachment to a window sash, whereby the latter may be conveniently raised and lowered. See Sash Trim, page 182, Figs. 4, 5, 6; also pages 806 to 808 and 916.
- SASH LIFT AND LOCK**—A sash lift provided with a locking lever, which locks the sash by engaging with a strike in the window frame and is released in the act of raising the sash. See page 808, No. 1349L.

- SASH LOCK**—A fastening controlled by a key, and adapted to secure a sash. See page 809, Nos. 910, 912 and 914.
- SASH PIN**—A form of window spring-bolt See page 809, No. 915.
- SASH PLATE**—Synonymous with Sash Center. See Transom Trim, page 194, Figs. 8 and 9; also page 805.
- SASH PULL**—A handle for attachment to the under side of the lower rail of an upper sash of a double-hung window, for pulling down the sash. (Also called Window Pull and Pull Down Handle). See Sash Trim, page 182, Fig. 7.
- SASH PULLEY**—Synonymous with Frame Pulley, page 20.
- SASH RIBBON**—A thin metal band adapted for use with sliding sashes in place of cord or rope.
- SASH SOCKET**—A metal plate containing a hole or cup adapted to receive a sash hook. See Sash Trim, page 183, Fig. 8; also page 804.
- SASH WEIGHT**—A weight used to balance sliding sashes usually of cast iron and of long cylindrical form. See Weights of Sashes and Glass, page 1088.
- SCREEN DOOR CATCH**—A light knob-latch, similar to a cupboard turn but furnished with a hub, a spindle, and a pair of knobs or lever handles. See page 783, No. 530.
- SCREWLESS KNOB**—A term originally applied to knobs provided with a clamp or vice for attaching them to the spindle and thus dispensing with the old-fashioned "side screw." Now used also to designate any knob which eliminates the "side screw" and substitutes a fastening which obviates all tendency to become loose, even though employing a set-screw, as, for example, in the case of the Triplex Spindle. See page 10, Fig. D; also Knobs and Spindles, page 171, Fig. 2.
- SECRET LATCH**—One operated by a concealed button or other device; for use on office gates, etc. See page 616, No. 4305.
- SET-SCREW**—One which by checking another screw, or other movable part, prevents it from loosening. See page 10, piece 27.
- SHACKLE (of padlock)**—A swinging or sliding link, usually curved, adapted to engage with a staple and to be fastened by the locking mechanism of the padlock. See Padlocks, page 215.
- SHANK (of a key)**—That part which connects the bit or wing with the bow or handle. See Keys, page 139.
- SHANK (of a knob)**—That part which contains the hole or socket to receive the spindle and which forms a base for the top or enlarged portion of the knob. See page 10, piece 28.

- SHELF PIN**—A metal pin for supporting a book shelf; called also Shelf Support or Shelf Rest.
- SHELL** (of padlock)—The case or body of a padlock, which contains the mechanism. See Padlocks, page 215.
- SHIP LOCK**—One wholly of brass for use on ships; usually of heavy construction. See page 621, Nos. 1770 and 1783.
- SHUTTER ADJUSTER**—A swinging arm for adjusting and securing shutters in any desired position. See Shutter Trim, pages 190 and 191.
- SHUTTER BAR**—A fastening for folding blinds consisting of a bar pivoted to a plate and engaging with a hook or stud attached by another plate to the other half of the blind. See page 189, Fig. 2; also pages 812 and 922.
- SHUTTER BUTT**—A small hinge, usually narrow, adapted for use on shutters and light doors. See Shutter Trim, page 189; also pages 772 and 922.
- SHUTTER FLAP**—A small hinge, usually broad, intended to be screwed to the surface of the shutter or small door. See Shutter Trim, page 189, also pages 773 and 922.
- SHUTTER KNOB**—A small knob for inside shutters. See Shutter Trim, pages 190 and 796 and pages 940 to 943.
- SHUTTER LIFT**—A lift for shutters; similar to a sash lift (but heavier). See Sash Lift, page 28.
- SHUTTER SCREW**—A heavy thumb-screw for securing one end of a vertical shutter.
- SIDE-SCREW**—A small screw used for securing a common knob to its spindle. See Knobs and Spindles, page 168.
- SLIDER**—A small sliding tumbler actuated by the key, and dogging the plug by which motion is transmitted to the bolt, as, for example, in Bramah lock.
- SLIDING DOOR KEY**—One adapted for use with a mortise lock and a cup escutcheon on sliding doors; usually adjustable as to length. See page 650.
- SLIDING DOOR LOCK**—A lock for use on a door which slides, and having hook-shaped bolts to engage with its strike. See pages 650 and 651.
- SLIDING DOOR PULL**—A plate or box, arranged to be mortised into the edge of a sliding door and containing a handle, or pull, for use in moving the door from its recess. See page 789, Nos. 58 and 68.
- SLIDING DOOR RAIL**—A metallic rail for carrying and guiding the sheaves of sliding doors.

- SLIDING DOOR STOP**—A small plate for attachment to floor or ceiling and provided with a stump or projection to limit the motion of a sliding door. See page 789, Nos. 900 and 901.
- SLIDING TUMBLER**—A lock tumbler having a sliding motion. See Tumbler, page 32B.
- SOCKET**—See Thimble, page 32.
- SOLID ROLLED**—A term used to designate Escutcheon Plates and other articles made from rolled, or wrought metal of sufficient thickness to show a suitable bevel without turning back the edges (as is done in "reversed" work). See W6000 Escutcheon Plates, page 705. For illustrations see page 704, Figs. 1 and 2.
- SPACING**—The distance between the center of a knob-hub and the center of a key-hole of a lock or its escutcheon plate. See page 10, Fig. 22.
- SPINDLE (of lock)**—The axis or shaft, usually of square section, which carries the knobs of a lock, and communicates their motion to the latch mechanism. See page 10, piece 26; also Knobs and Spindles, page 170.
- SPRING HINGE**—A hinge or butt containing one or more springs acting to move the door into the closed position. See Double-acting Hinges, page 199.
- SQUARE BOLT**—A rim bolt of rectangular section. See page 763, No. 294.
- STAPLE (of padlock)**—A metallic loop, or eye, for receiving the shackle of a padlock, and adapted to be driven into, or otherwise attached to, a door or jamb. See Padlocks, page 215.
- STEM (of a key)**—The round portion of the bit or wing which forms the trunnion or axis of the key, and on which it rotates when in the lock. See Keys, page 139.
- STILE (of a door)**—Any of the vertical members which enclose the panels and with the rail constitute the frame work.
- STOP (of a lock)**—That which serves to fasten the bolt or the knob in the locked or unlocked position, usually the latter. See page 10, piece 4.
- STOP BEAD SCREW**—Synonymous with Stop Screw.
- STOP KEY**—One for insertion in a key hole from one side to prevent the entrance of a key from the opposite side.
- STOP SCREW**—A screw for fastening the stop bead of a window to the frame. See Sash Trim, page 182, Fig. 3.
- STOP WORK**—See Stop (of a lock).
- STORE DOOR HANDLE**—A bent handle, usually mounted on a plate, provided with a lever or thumb handle for actuating a latch bolt, and adapted to be applied to the surface of a door. See pages 738 to 760.
- STORE DOOR LATCH**—One containing a spring latch bolt only, and adapted to be operated by thumb handles. See page 664, No. 1122.

- STORE DOOR LOCK**—A heavy lock containing a dead bolt only, and usually operated by a key from both sides. See page 618, No. 12.
- STRAP HINGE**—A hinge, of which one (or both) of the leaves has considerable length, and is adapted for attachment to the surface of a door. See pages 847 to 866.
- STRIKE**—A metal fastening, on the door frame, into which the bolt of a lock is projected to secure the door. Applied both to the flat plate used with mortise locks, and to the projecting box used with rim locks. Synonymous with "striker," "striking plate" and "keeper."
- STUMP**—A small piece or projection in a lock for the engagement of one part with another, or to receive a screw or rivet. Also, but inaccurately, used as synonymous with "Fence." See page 106, Fig. 9.
- SUB-MASTER KEY**—One capable of controlling a subordinate group of master-key locks, each having a different key of its own, but all in turn controlled by the main or grand master-key. (There may thus be a number of sub-master keys under one grand master-key.) See Master-Keyed Locks, page 121.
- SUBSEQUENT LOCKER**—A term applied to a time lock constructed to lock by the action of the clock work at a predetermined hour subsequent to, and irrespective of, the time of closing the door. See Bank and Safe Locks, page 220.
- SUB-TREASURY LOCK**—One for use on the iron doors of the small chests or boxes within a fire-proof safe, commonly called "Sub-Treasuries." See Bank and Safe Locks, page 223.
- SURFACE HINGE**—Synonymous with Strap Hinge.
- SURFACE SASH CENTER**—One adapted for application to the *surface* of a transom sash.
- SWIVEL SPINDLE**—A spindle having a joint or swivel midway in its length, whereby the knob attached to one end may be made stationary and inoperative, while the knob attached to the other end is left free to rotate, and thus to actuate the latch mechanism. See Knobs and Spindles, page 172, Fig. 3.
- TAIL PIECE**—A sliding or vibrating piece intermediate between the hub and latch bolt of a lock for transmitting motion from the former to the latter. See page 10, piece 32.
- TALON**—The notch or opening in the bolt of a lock with which the key engages to throw the bolt. See Lock Primer, page 106, Fig. 9.
- T-HANDLE**—A cross handle for actuating the bolt of a lock and used in place of a knob. See page 792, Nos. 7, 8, 9 and 10.
- THIMBLE**—The socket or bearing on an escutcheon plate to receive the knob shank. Also called Socket. See page 10, piece 29.
- T HINGE**—A surface hinge of which the chief dimension of one leaf is vertical and of the other leaf horizontal.

- THREAD ESCUTCHEON**—A small key plate, conforming to the outline of a key-hole and intended to be inserted therein.
- THREE-PLY BUTT**—Synonymous with Pocket Butt. See page 773, No. 60.
- THUMB-PIECE**—A small knob, usually flat, but sometimes circular in form. See page 792, Nos. 1, 4 and 5.
- THUMB-BOLT**—A door bolt operated by a rotating thumb-piece or a small knob. See page 763, Nos. 91 and 92.
- THUMB LATCH**—A door fastening consisting of a pivoted bar which crosses the joint of the door to engage with the strike on the jamb, the free end of the bar being raised to disengage it from the strike on the jamb, by a transverse pivoted bar passing through the door, the latter bar operated on one side by the thumb and on the other by the finger.
- TILL LOCK**—See Drawer Lock, page 18 ; also see page 675.
- TIMELOCK**—One actuated automatically by clock work, and having no key-hole, spindle or other connection through the door. Also called Chronometer lock. See Bank and Safe Locks, page 221, Fig. 1.
- TOILET BUTT**—Synonymous with Water Closet Butt. See page 819.
- TOWEL HOOK**—A straight bar, usually of considerable length and with ball tip. See page 795, Nos. 1606 and 1607.
- TOWER BOLT**—A modified form of barrel bolt, in which the locking bar is shortened.
- TRANSOM**—A horizontal mullion or cross-bar in a door or window. Commonly used as synonymous with transom light. See Transom Trim, page 192.
- TRANSOM CATCH**—A fastening adapted for use on transom lights. See Transom Trim, page 195 Fig. 10, and page 783.
- TRANSOM CHAIN**—A short chain to limit the movement of a transom sash ; usually provided at each end with a plate for attachment. See Transom Trim, page 195, Fig. 11 ; also page 812.
- TRANSOM LIFTER**—An apparatus for actuating and holding a transom light. See Transom Trim, page 194 ; also pages 813 to 815.
- TRANSOM LIGHT**—A sash occupying an opening in the head of a door frame over the transom bar. See Fan Light, page 19.
- TRANSOM PLATE**—Synonymous with Sash Center, page 28.
- TRIPLEX SPINDLE**—A lock spindle composed of three triangular rod which, when combined form a rectangle, and, which give an automatic adjustment by frictional engagement with the knob when expanded by a set-screw. See page 10, piece 26 ; also Knobs and Spindles, page 171, Fig. 2.
- TUBULAR LOCK**—A rim lock having a fixed tube, containing the tumblers, attached to the lock case and usually projecting through the door.

- TUMBLER**—The obstruction or guard in a lock which dogs or prevents the motion of the bolt, and which is set by the key during the act of locking and unlocking. See page 10, pieces 13 and 19.
- TURNBUCKLE**—Synonymous with Turn Button.
- TURN BUTTON**—A rotary bolt or fastening made in various forms. The common form is a simple bar secured by a screw in center on which it rotates. In another form this bar is mounted on a circular plate. See Minor Fastenings, page 196, Figs. 3 and 4. The term is also applied to a catch having a sliding bolt operated by a rotating knob or T-handle. See pages 816 and 817.
- UNIT LOCK**—A term applied to a lockset when so constructed that all of its parts (the lock, knobs and escutcheon plates) are permanently combined in a single construction or unit. See page 1080.
- UPRIGHT LOCK**—One whose major dimension is vertical. See page 617, No. 702.
- VESTIBULE LATCH**—A lock resembling a front door lock except in omitting the dead-bolt mechanism. One in which the latch-bolt is actuated from the outside by a key and from the inside by a knob; the outer knob being controlled by a stop. See Front Door Lock, page 142, and pages 653 to 660.
- VENEERED FRONT**—A lock front or face consisting of two plates, the lower riveted to the lock case, and the upper (usually of a more expensive material) *permanently* fastened to the lower. Used in contradistinction to "Armored front. See Wrought Metal Locks, page 130, Fig. 2.
- WARD**—A projection from the case of a key-hole of a lock, tending to obstruct the entrance of the key, and necessitating a coincident depression or grooving in the key. See Lock Primer, page 105, Figs. 1, 2 and 3.
- WARDED KEY**—One having grooves or notches, usually in the wing or bit, which coincide with corresponding wards or projections in the lock case or key-hole. See Lock Primer, page 105.
- WARDROBE HOOK**—One with a single prong, for use on the side walls of closets and wardrobes.
- WATER CLOSET BUTT**—A surface butt, usually of irregular outline, for closet seat. See page 819. No. 265.
- WHEEL** (of combination locks)—See Combination Tumbler, page 15.
- WINDOW PULL**—See Sash Pull, page 29.
- WINDOW SPRING BOLT**—A spring-bolt for holding a sliding sash in any desired position, open or shut; used with unbalanced sashes. See page 809, No 915.
- WING KEY**—One having a wing or projection for operating the bolt or tumblers of a lock. See Keys, page 139.

Explanatory Note as to Method of Pricing.

AN important purpose which this volume is intended to serve is to assist not only in the selection of Builders' Hardware, but also in enabling its value to be ascertained with sufficient accuracy for the purpose of provisional estimates and, especially, to furnish indications of *relative values* to serve as a guide to quality and cost in selection, and in the preparation of specifications.

Obviously exact prices cannot be given, for the reason that these are subject to constant fluctuations in sympathy with changes in market conditions. The effort herein has been to indicate prices which are *relatively* in harmony, and which are sufficiently high to cover all contingencies. Usually it will be found in practice that the actual cost will be considerably less than the values herein indicated. By submitting a definite list or schedule of articles to a dealer or manufacturer for estimate, the proportion between a quotation thus obtained and the values indicated in this volume will establish a ratio (as on page 36A) which will probably hold good, at the same date, as to other indications of value contained herein. Probably the chief use of these values, however, will be the indication they afford of the *relative cost* of the different articles and designs to which they apply.

Wherever feasible specific prices are given for each article. In the case of extensive groups of articles, the pricing of which in detail would require undue space, reference is made to a similar group which is fully priced, and a "multiplier" is given which indicates the ratio which the prices in one group bear to those of the other.

In the case of *Ornamental Hardware* each "multiplier" is based on the difference between the aggregate price of a selected number of typical pieces in "Cluny," and the aggregate price of a like number of similar pieces in the design to which the multiplier applies. The actual difference will vary with the kinds and quantities of pieces used, but the approximate value obtained by means of the multipliers will indicate fairly the relative prices of the various designs and in the various finishes.

In the case of *Plain Hardware* the "multipliers" for the various finishes are based in like manner on a selected number of typical pieces.

PRICES, SCALES AND MULTIPLIERS.

In *Ornamental Hardware* the Cluny design (priced in detail in Old Copper Finish, CX22, on pages 710 to 735) is used as a *scale* by which to indicate approximately the prices of all other Ornamental Designs by means of "multipliers," that is, figures which indicate the ratio which the price of any other design bears to that of Cluny, various finishes of the same design being indicated by different multipliers.

For example: the multiplier 2.5 indicates that the price of the design in the finish to which that multiplier applies, is approximately two and one-half times that of Cluny (in Old Copper Finish); the multiplier .8 indicates that the price is approximately eight-tenths that of Cluny (in other words, 20 per cent. less than Cluny).

In *Ornamental Lock-sets* the Cluny design is also used as a *scale*, as explained above, the price of lock and trim being given separately in each case. To obtain the price of a lock-set with trim of any other design, convert the value of the trim, as given in the Cluny design, (by using the multiplier given under the design selected), and to the value of the trim, thus ascertained, add the price of the lock.

In *Plain Hardware* (i. e. not Ornamental), specific prices are given in Bronze and Brass in the Buffed finishes (BZ10 and AZ10 respectively). Approximate prices in other finishes may be obtained by means of the multipliers listed below, and in the manner explained on page 34.

Finishes.	Multipliers.
Antique Copper or Brass	1.10
Nickel Plate,	1.10
Silver Plate,	2.20
Gold Plate,	9.00
Bower-Barffed Iron, . . . . .	.90

In *Plain Lock-sets* specific prices are given in Bronze and Brass in the Buffed finishes (BZ10 and AZ10 respectively) the price of lock and trim being given separately in each case. To obtain the price of a lock-set in other finishes, convert the value of the trim (by using the multiplier given above) and to the value of the trim thus ascertained add the price of the lock.

INDEX TO PARTS CONTAINING PRICES.

- Part III contains prices of Ornamental Hardware.
- “ IV contains prices of Locks.
- “ V contains prices of Locks in sets, complete with trim.
- “ VI contains prices of Plain Bronze and Brass Hardware.
- “ VII contains prices of various Groups of Hardware.
- “ VIII contains prices of Ornamental Cabinet Hardware.

PRACTICAL EXAMPLES.

To illustrate the method of using the system of pricing herein adopted the following practical examples are given.

Where specific prices are given they are to be used.

Where the text indicates that a “multiplier” must be used, follow the instructions given on page 34.

In examples I, II and III page references are inserted to assist in explaining the method of using this book to obtain

approximate estimates of cost; in practical work they may be omitted, as shown by examples IV and V.

The ratio between the values herein indicated and current market values may be established in the manner explained on page 33; having done so, the corresponding correction should be made as indicated at the foot of Example IV.

EXAMPLE I. ONE PAIR FRONT DOORS.

The Lock Trim and Push Button in Bristol Design, all other items in Plain Brass; all in Buffed Brass Finish (AZ10).

3 Pairs Butts, No. 750, 5×5 inches (page 777), at \$9.30 per pair	\$27.90
1 Flush Bolt, No. 283, 12 inch (page 770), say	6.00
1 " " " " 24 " " " "	10.00
1 Lock, No. 750 (page 656)	14.50
Lock Trim, on Cluny basis (page 711)	\$13.85
1 Push Button, No. 1415, on Cluny basis (page 735)	3.25
Total, on Cluny basis	\$17.10
"Multiplier" for Bristol Design in AZ10 finish, ".9" (page 549), thus, 17.10 × .9	15.39
	<u>\$73.79</u>

EXAMPLE II. ONE BEDROOM DOOR.

The Lock Trim in Chester Design (outside), and Fairfax Design (inside); Butts and Lock Front in Plain Bronze; all in Buffed Bronze Finish (BZ10).

1 1/2 Pairs Butts, No. 780, 4 1/2 × 4 1/2 inches (page 777), at \$6.00 per pair	\$ 9.00
1 Lock, No. 1500 (page 636)	3.00
Lock Trim, on Cluny basis (page 717)	\$ 8.00
"Multiplier" for Chester Design in BZ10 finish, ".9" (page 549), thus, 8.00 × .9	\$ 7.20
"Multiplier" for Fairfax Design in BZ10 finish, "2.5" (page 551), thus, 8.00 × 2.5	20.00
Only half trim used on each side; therefore 1/2 of \$27.20 =	13.60
	<u>\$25.60</u>

EXAMPLE III. ONE PAIR FRENCH WINDOWS.

The Bolt in Fairfax Design and Butts in Plain Bronze; all in Buffed Bronze Finish (BZ10).

3 Pairs Butts, No. 780, 4×4 inches (page 777), at \$5.10 per pair	\$15.30
1 Cremorne Bolt, No. 893, Fairfax Design (page 887)	41.50
1 Flush Bolt, No. 280, 12 inch (page 770), say	6.00
	<u>\$62.80</u>

WORKING EXAMPLES.

To facilitate the conversion of values from the Cluny base a separate column may be provided for each design. The value of the articles in each design, on the Cluny base, are then extended in the appropriate column, the footing of which gives their total. The application of the proper multiplier to this footing gives the total value of the article specified in the design and finish selected, and this figure can then be carried into the final column, the footing of which gives the total value of the goods covered by the schedule on the basis of the price system adopted in this volume. The manner of converting this to current market value is also indicated.

The result, as explained on page 33, will be an *approximation* to actual cost, which usually will be found sufficiently accurate for provisional estimates.

EXAMPLE IV. FOR RESIDENCE.

(Page references omitted).

		—On "Cluny" Basis—		Plain
		Medford.	Chester.	Goods.
1	PAIR FRONT DOORS, RIGHT HAND—			
3	Pairs Butts, 750, 6×6 inches, AZ10	. . . . .	. . . . .	\$43.05
1	Bolt, 283, 12 ins. . . . . "	. . . . .	. . . . .	6.00
1	" " 24 " . . . . . "	. . . . .	. . . . .	10.00
1	Lock, 750 . . . . . "	. . . . .	. . . . .	14.50
1	Set Medford Trim "	\$13.85	. . . . .	. . . . .
1	" " " (dummy) "	13.85	. . . . .	. . . . .
1	Push Button, 1415, Medford, "	3.25	. . . . .	. . . . .
1	PAIR SLIDING DOORS—			
1	Lock, 1706 AZ10	. . . . .	. . . . .	8.40
4	Cup Escutcheons, Chester . . . . . "	. . . . .	\$12.00	. . . . .
5	BEDROOM DOORS—			
7½	Pairs Butts, 780, 4½×4½ ins., AZ10	. . . . .	. . . . .	45.00
5	Locks, 1500 . . . . . "	. . . . .	. . . . .	15.00
5	Pairs Glass Knobs, G67, 2 roses, "	. . . . .	. . . . .	53.75
10	Key Plates, 803, Chester . . . . . "	. . . . .	4.50	. . . . .
10	DOUBLE HUNG WINDOWS—			
10	Sash Fasts, 1372 AZ10	. . . . .	. . . . .	12.50
20	" Lifts, 1349, Chester . . . . . "	. . . . .	22.00	. . . . .
	Plain Goods			\$208.20
	"Mult'r" for Medford, (AZ10) 1.3×	30.95=		40.25
	" " Chester, " .9×	. . . . .	38.50 =	34.65
				Total, \$283.10
	Discount to conform to market, say 50 per cent.			141.55
	Approximate value, say			\$141.55

EXAMPLE V. FOR RESIDENCES.

(Page references omitted.)

PARLOR		Value in Plain Bronze Buffed.	Value in Finishes Selected.
1 PAIR SLIDING DOORS, OFF HALL—			
1	Lock-set, 1706 × 70854 GY10	\$20.00	
5 DOUBLE HUNG WINDOWS—			
5	Sash Fast, 1372 “	6.25	
10	Sash Lifts, 71349 “	8.00	
“Mult'r” for Gold (GY10) 9. ×		34.25	= \$308.25
DINING ROOM.			
1 DOOR, OFF HALL—			
1 1/2	Pairs Butts, 780, 4 1/2 × 4 1/2 . . . SY52	\$9.00	
1	Lock-set, 1500 × W56 × 3/7410 “	7.00	
3 DOUBLE HUNG WINDOWS—			
5	Sash Fast, 1372 “	6.25	
10	Sash Lifts, 71349 “	8.00	
“Mult'r” for Silver (SY52) 2.2 ×		30.25	= \$66.55
BEDROOMS.			
5 DOORS, OFF HALL—			
7 1/2	Pairs Butts, 780, 4 1/2 × 4 1/2 . . . CX22	\$45.00	
5	Sets 1500 × W56 × 3/7410 . . . “	35.00	
10 DOUBLE HUNG WINDOWS—			
10	Sash Fast, 1372 “	12.50	
20	Sash Lifts, 71349 “	16.00	
“Mult'r” for Copper (CX22) 1.10 ×		108.50	= 119.35
BATHROOM.			
1 DOOR, OFF HALL—			
1 1/2	Pairs Butts, 780, 4 1/2 × 4 1/2 . . . NZ10	\$9.00	
1	Lock-set, 1505 × W56 ×		
	3/7830 × 3/7831 “	7.45	
1 DOUBLE HUNG WINDOW—			
1	Sash Fast, 1372 “	1.25	
2	Sash Lifts, 71349 “	1.60	
“Mult'r” for Nickel (NZ10) 1.10 ×		19.30	= 21.25
Total			\$515.40