Keeping Doors Closed

Pick a catch that fits the cabinet

by Christian H. Becksvoort

A handsome cabinet door, hung precisely in its frame, is a pleasure to use. But the door isn't quite finished until it's been fitted with a proper catch. There sure are plenty of choices, from simple turn buttons to elaborate library catches. The hard part is picking the catch that's appropriate. What's appropriate? A catch that is in keeping with the period, style and function of the cabinet. Brass bullet catches, for instance, would look out of place on an Arts-and-Crafts piece with hand-wrought

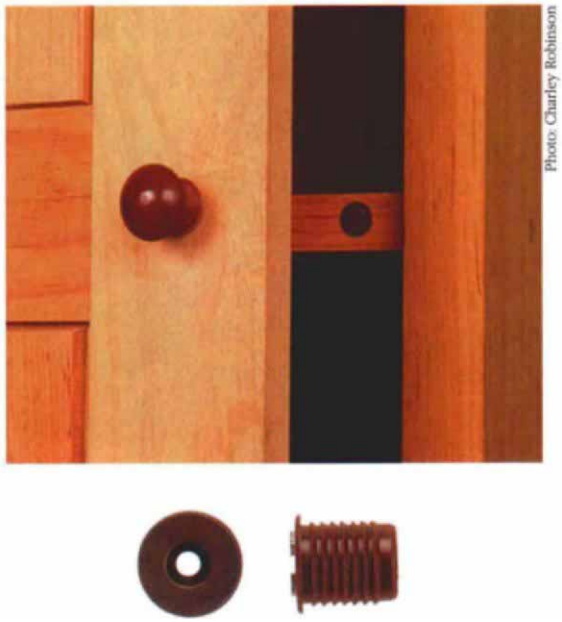
iron hinges and knobs. Likewise, high-end furniture is no place for plastic-encased magnets or for steel touch latches that are stamped out by the carload.

Catches have functional as well as aesthetic differences, and some catches work better than others on certain kinds of doors. And like everything else, door catches vary in price. Their cost in relation to a piece of furniture is very small, though, so it makes sense to choose exactly the right one.

To help you sort through some of the choices, I have taken a look at a dozen of the most popular door catches. They "include commercially available catches and locks (see the sources of supply box on p. 88), as well as mechanisms built in the shop. In addition to trying these different catches for single doors, I've also found some interesting ways to keep double doors closed, especially in those difficult situations where there is no center divider between the doors.

Magnetic catches

Magnetic catches come in a variety of sizes and shapes and can be used for single or double doors. For large doors, magnetic catches often are used in pairs—at the top and bottom of the door. Most



magnetic catches are housed in plastic, which I find objectionable for high-end work. However, there are some small, round magnets (see the photos above) that mount in holes drilled directly into a door stop or a fixed shelf. This neat installation is more appropriate for better-quality cabinets. Nevertheless, I still don't care for magnetic latches. They're generally ugly, they sound clunky and they can be difficult to fine-tune for just the right amount of holding power.

Touch latches

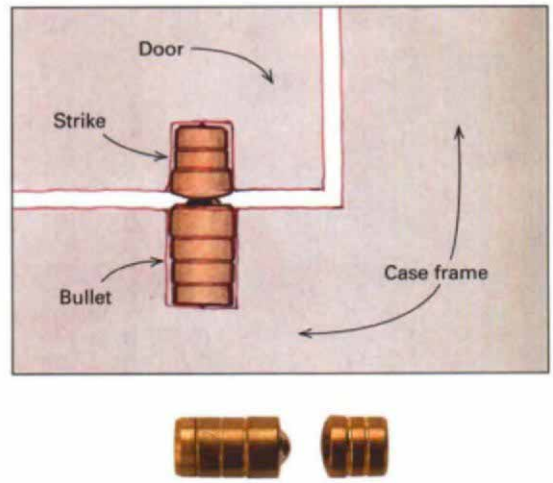
Touch latches, both mechanical and magnetic, are used most often on kitchen and bathroom cabinets. They also can be used for shop and office furniture. Mechanical touch latches operate with a ratchet and a spring mechanism. When closing the door, the ratchet engages and holds the door closed. Then, when tapped or touched, the ratchet releases, and the spring mechanism pushes the door open. Unlike a mechanical latch, a magnetic touch latch

(see the photo above) uses a magnet on the end of a spring-loaded plunger. Both types require ⅛ in. to ¼ in. of clearance between the door and the doorstop.

I find these latches gimmicky. I use them only on doors that don't get much use, such as secret-compartment panels, because they tend to wear out faster than other types of catches.

Bullet catches

Bullet catches (see the drawing and the photo below) should be used at the top and bottom of doors. These catches have a few drawbacks. They require fine-tuning, they're sensitive to any sea-



sonal changes in the dimensions of the door, and they can't handle warps in the door very well. Even so, they are among my favorite catches because they're unobtrusive and work so well when adjusted correctly. Bullet catches made by Brusso are undoubtedly the best. They are the only ones that have a groove in the strike (or keep) to allow the door to move seasonally. Most other bullet catches have a dimple in the strike, which doesn't al-

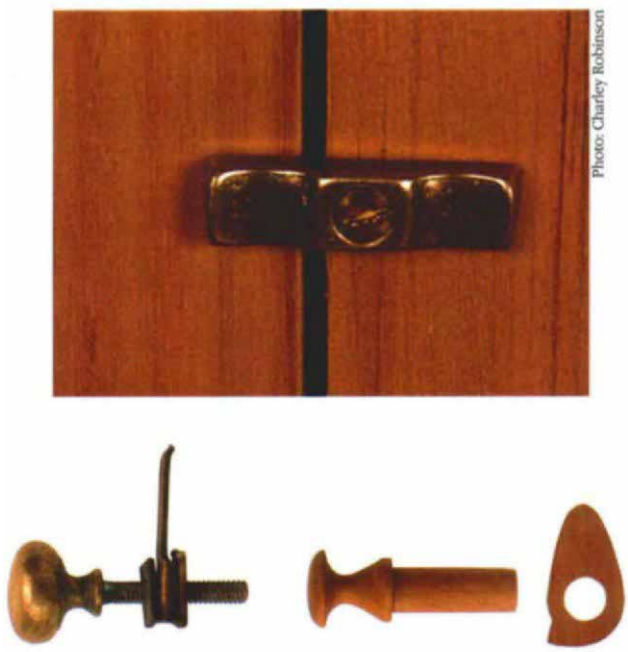
Photos except where noted: Boyd Hagen

low any seasonal door movement. It is standard procedure to mount the bullets in the case frames and the strikes on the top and bottom of the door stile. This way, the bullets wear grooves on the inside edges of the door as opposed to the outside edges of the case frame where they would be visible.

Nothing sounds better than the click of a well-adjusted bullet catch. But these closures can be difficult to adjust and only should be used on small to mid-sized, perfectly flat doors because of their limited holding power. Bullets are appropriate for contemporary furniture as well as shop and office use.

Spinners

Spinners, also called turn buttons or button latches, have a wide range of applications. There are two basic types: exterior and interior. They are low-tech, virtually foolproof and work well in keeping slightly warped doors closed. An exterior spinner (see the top photo) consists of a small (usually 1¼ in. to 2 in. long) bar with a hole in the center to take a screw. Spinners are mounted on the face frame next to the door stile. In the horizontal position, the spinner holds the door closed. Turned vertically, the door can be opened. Commercially made spinners usually are brass. Shopmade models can be made of wood. Victorian spinners often had brass backing plates to eliminate wear. Simple spinners are great for shop cabinets; more elaborate versions suit certain period pieces.



Interior spinners (see the bottom photos above) work on the same principle, but they are attached inside the door to the shaft of the door knob. Brass knobs have metal spinners threaded onto the shaft and usually locked in place with a small screw. Wooden knobs have shopmade spinners, usually oval in shape, which are pinned or screwed to the shaft to prevent them from slipping. Cabinets with full face frames are ideal for spinners because the spinner can catch directly behind the frame. Cabinets without face frames require a small groove in the cabinet side for the spinner to lock into. If there is any play between spinner and face frame (or spinner and groove), you can glue in a small tapered shim that will draw the door tighter as the spinner closes. Thin plastic washers between the spinner and door and the knob shoulder and door virtually eliminate friction.

Double-ball catches

A variation of the bullet catch is the double-ball catch (see the photo below). This two-part catch consists of a contoured metal strike that pops between a pair of spring-loaded ball bearings.

This is a relatively recent innovation that permits some door movement, allows the holding power to be adjusted and keeps doors from sagging in the closed position.

A word of warning when using double-ball catches: Never mount them in a horizontal position when using solid-wood doors. When mounted vertically, the strike can slide side to side between the two ball bearings, providing ¼ in. to ⅜ in. of movement. However, because there is only 1/64 in. or so between the strike and the ball housings, mounting this catch horizontally allows for no door movement. Double-ball catches can be particularly difficult to install on single-door cabinets, but they're well-suited to high-end furniture because the holding power can be adjusted for just the right feel when opening the door.

Key locks

Standard key locks (see the photo below) also can be used to keep doors closed, with or without any other kind of catch. These are most appropriate for little-used doors requiring extra security,

Drawings: Matthew Wells

because the key must be used each time to open and close the door. Either full- or half-mortise locks can be used. If I go to the trouble of installing a key lock, I use a good one—a three-, four- or even six-lever or tumbler lock. The cheap, single-lever locks aren't worth the effort to install because they can be opened with just a piece of bent wire. On the positive side, a key lock is an attractive visual touch on a cabinet; the downside is that they take time and patience to install correctly.

Closing double doors

Double doors with a center divider can be treated just like single doors. When no divider (or fixed shelf) is present, keeping double doors closed becomes more challenging. The first and easiest

Photo: Charley Robinson

choice for inset doors is bullet catches because the catches are mounted above and below the doors and don't need to grab a fixed divider to work.

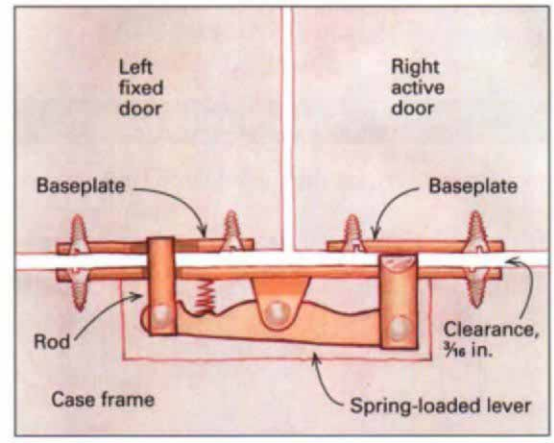
Another approach I often use is to anchor or fix one door (usually the left one) in place. Then I use it to incorporate one of the catches mentioned in this article to keep the second door closed. How do you anchor a door? There are three simple and readily available pieces of hardware that can be used. One of the easiest to install is a surface-mounted elbow catch (see the photo above) that is screwed to the inside of the door, either at the top, bottom or under a fixed shelf. Available in a variety of qualities, these catches can suit everything from a shop-grade cabinet to really high-end work.

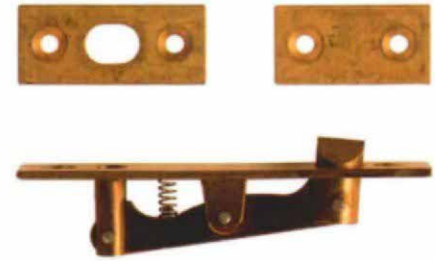
Another option for anchoring a door is a pair of surface-mounted sliding bolts screwed to the inside of the door, one at the top and the other at the bottom. Holes need to be drilled into the top door stop and into the bottom shelf-door stop for the bolt barrel. Brass plates mortised into the front edges of the stops make a neat, clean installation. Surface bolts should be sized appropriately for the door. I like solid-brass bolts, even on high-end cabinets.

The third method is a little more costly and time-consuming, but looks more elegant. Flush bolts are mortised into the top and bottom edges of the door stiles. Then latching holes are drilled into the case top and bottom. For solid doors, these holes actually should be elongated slots to allow for door movement. I would use these closures only on top-end cabinets because installation is labor intensive.

Once one door can be locked in place (I usually pick the left one), it can be treated more or less like a divider. I often use an interior wooden spinner on the knob of the other door.

***Library** catches—Another* approach to latching double doors is a library catch (see the drawing and photo below). This unusual piece of hardware is simple to use once it is properly mortised into the cabinet. It consists of a baseplate with a spring-loaded lever below. When both doors are closed, the right (or active) door forces a rod down, pushing another rod on the opposite side of the lever up into the left (fixed) door. The left door remains fixed





only as long as the right door is closed. As soon as the right door is opened, the spring retracts the rod and releases the fixed door. To hold the right door closed, use one of the catches suitable for single doors.

For medium and large cabinet doors, a library catch should be installed top and bottom. Clearances above and below the door must be kept to less than 3/16 in., or the rods will not engage the door. Library catches are a relatively new type of closure that I've used only a few times. Both my customers and I have been pleased with the results.

Chris Becksvoort builds custom furniture in New Gloucester, Maine, and is a contributing editor to Fine Woodworking.

Sources of supply-

I've used the following companies and found they offer good-quality products and excellent service. There are plenty of other sources for quality hardware as well (see *FWW #112,* pp. 68-73).

Larry & Faye Brusso Co., 4865 Highland Road, Suite J, Waterford, MI 48328; (810) 674-8458

Garrett Wade Inc., 161 Avenue of the Americas, New York, NY 10013; (800) 221-2942

Whitechapel Ltd., PO Box 136, Wilson, WY 83014; (800) 468-5534

The Woodworkers' Store, 21801 Industrial Blvd., Rogers, MN 55374; (800) 279-4441

Woodworker's Supply, Inc., 1108 N. Glenn Road, Casper, WY 82601; (800) 645-9292