

# Hinges and

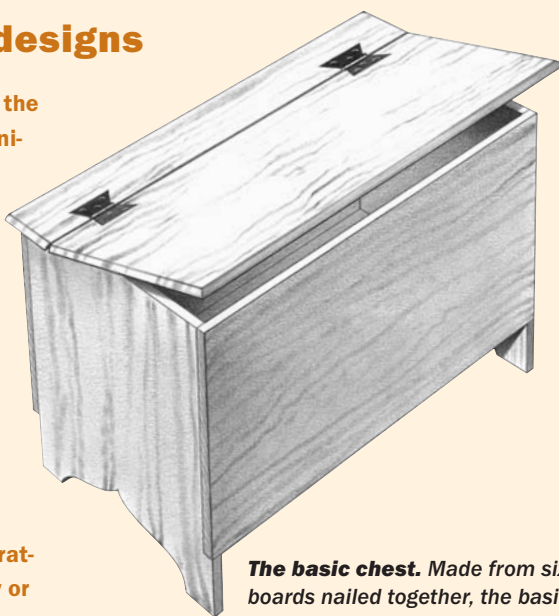
Traditional, decorative  
or practical, there's  
hardware to match  
any style

BY MIKE DUNBAR

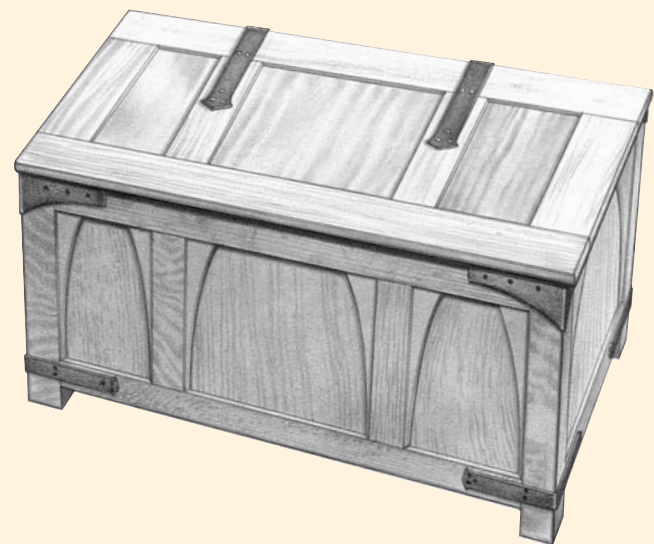


## Blanket-chest designs

Blanket chests were one of the most common pieces of furniture made by the Colonists, so they have a strong association with American woodworking. Many a simple six-board chest stood at the foot of the bed to store blankets, but others were elaborate and intended as a living room's centerpiece. Cabinetmakers lavished a lot of detail on such pieces, decorating them with carving, inlay or faux painting.



**The basic chest.** Made from six boards nailed together, the basic chest had a lid that opened via a pair of easy-to-install butterfly hinges.



**A traditional chest.** From Colonial times until the Arts and Crafts Movement, chests have relied on strap hinges, which may be mounted on the inside or outside of the lid.

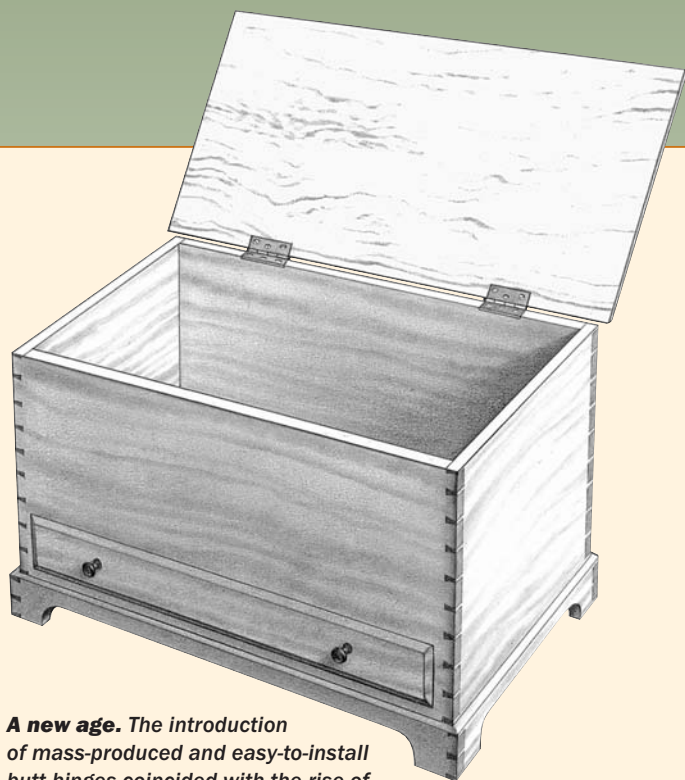
# Lid Supports for Chests

**A**lmost every furniture style—from Shaker to Arts and Crafts—has adopted and adapted the basic chest, in the process creating a range of styles and uses. But no matter which design you choose, a chest needs hardware.

I am always surprised when someone invests a great deal of effort in making a piece of furniture and then buys whatever hinges the local hardware store carries.

If you source from the quality suppliers that I'll mention, the choice of hardware is enormous: You can choose hinges that not only match the quality but also the style of your workpiece. I'll show you how to install the brilliantly simple snipe hinges in that six-board chest you're making; I'll show you where to find and how to install hand-crafted strap hinges worthy of the finest blanket chest; and if it's a toy box for a child that you're making, I'll cover hinges that will resist the most destructive toddler as well as lid supports to prevent crushed little fingers. □

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**A new age.** The introduction of mass-produced and easy-to-install butt hinges coincided with the rise of Shaker furniture making.

## STRAP HINGES COMBINE BEAUTY AND STRENGTH

**Inside or outside.** This particular hinge mounts under the lid. Other styles may be mounted on the top of the lid.



The typical strap hinge has a long, narrow leg that extends more than halfway across the underside of the lid of a chest and a shorter but wider leg that attaches to the inside of the back board. The strap hinge is a strong choice for a chest because the long leg is secured at several locations, and the other leg is attached to the wide surface of the back board, not to its thin upper edge.

Strap hinges for chests are different from those used on doors in that the short leg is offset by a right-angle bend. This offset enables the leg to lie flat against the inside surface of the back board. The thickness of both the long leaf and the offset prevent the lid from sitting flush against the top of the chest. You can reduce this gap by insetting the offset, which is a simple process, or eliminate the gap by insetting the long strap, too, which is more time-consuming.



### Watch it on the web

For tips on installing a strap hinge, go to [www.finewoodworking.com](http://www.finewoodworking.com).

**A knife marks the spot.** Mark the back board of the chest where the offset arm of the strap hinge is to be inset. When ordering strap hinges, be aware that the offset should match the thickness of the boards you are using.

## BUTTERFLY HINGES ARE EXPOSED ON TOP OF THE LID



Although butterfly and H hinges were intended for doors, they can be used on a chest. These hinges are easy to install but require the lid to be designed with a plank at the back that's attached to the chest. Because these hinges are mounted on the outside of the chest, it pays to look for an attractive pair made from either wrought iron or brass. Butterfly and H hinges are not suitable for a chest that is intended to be locked.

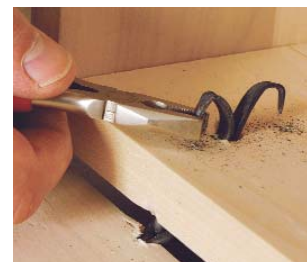


**A visible hinge.** Butterfly hinges and their close cousin, H hinges, are mounted on top of the lid, which is divided into two parts.

## SHIPE HINGES ARE ROOTED IN COLONIAL AMERICA



**Drill holes for the legs.** The angled holes in both the lid and the rear of the chest receive the two legs of each shipe hinge.



**Make fish hooks.** Pry apart each pair of soft iron legs with a screwdriver. Then use pliers to bend over the point 180°.

**Completed shipe hinge.** Pound the bent legs flat with a hammer, then file them flush with the surface. They will be barely visible under a coat of paint.



Early American six-board chests were too humble for expensive hardware, and their lids typically were attached with shipe hinges. This simple hinge looks like a pair of cotter pins linked by their eyes, and the ends of the shipe hinge's legs resemble the point of a nail.

A shipe hinge is installed by drilling holes at an angle through the lid's rear edge and near the top of the back board. The hinge's legs pass through these holes, and then the ends are bent over and hammered into the surface. The shanks also are pounded flush with the wood so that very little of the hinge is visible.

## BUTT HINGES ARE SIMPLE AND TIME-TESTED

Nineteenth-century cast-iron butt hinges were so easy to use that they quickly became the hinge of choice for blanket chests. However, cast iron cracks like glass when stressed, and a lot of these 19th-century cast-iron butt hinges broke.

Thankfully, breaking is not a problem with today's brass or steel butt hinges. But one drawback to all types of butt hinges is the way they are mounted. Because the lower leaf is secured to the back board's upper edge, overextending the lid pulls on the screws and can split the wood.



**Mark both sides.** Use a marking knife to locate the position of the hinges on both the lid and the back board of the chest.



**Cut the mortise.** Mortising the butt hinge into the lid and the back board enables the lid to sit flush.

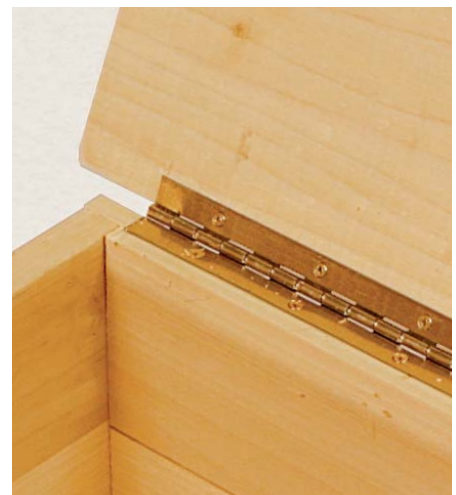
## PIANO HINGES ARE A MODERN SOLUTION

The piano hinge looks like a long butt hinge but does not have to be mortised. A piano hinge is screwed into the back board's upper edge. Because so many screws are used, it is much stronger than a butt hinge. A piano hinge would be suitable for a chest likely to receive rough treatment, such as a children's toy box.



**Cut to length.** Mark the length of the hinge and cut it to size with a hacksaw. The hinge should be sawn 2 in. shorter than the width of the chest.

**Long and strong.** The sheer size of a piano hinge gives it a lot of strength. Because it's thinner than a butt hinge, there is no need to mortise a piano hinge into a chest. The top, however, will not close flush against the case unless the hinge is mortised.



## A lid support is a worthwhile addition to a chest

Blanket chests usually are placed against the wall or at the end of the bed so that the lid is supported when open. However, as the broken hinges on many antique blanket chests testify, accidents do happen. If the lid is allowed to fall, its weight can damage or break

either the hinge or the chest. Unless you are making an exact reproduction, it is a good idea to include a support that prevents a chest's lid from falling backward. Chests for children's rooms can be fitted with lid supports that prevent the lid from slamming.

### A SIMPLE CHAIN

The simplest form of lid support is a chain. For small lids, brass-plated versions made for this purpose are available. For heavy lids, hardware stores carry a variety of different chains sold by the foot.

**Brass-plated chain makes the link.** Screw one block into the lid about 4 in. from the rear edge. Open the lid to the desired angle, then attach the other block to the side of the chest. For extra support, a matching chain can be attached to the other side of the chest.



### BRASS-PLATED FRICTION SUPPORT

An attractive alternative to a chain is a brass-plated friction support. This type of support is either straight or curved (for situations in which depth is limited). The tension adjusts by tightening a screw.



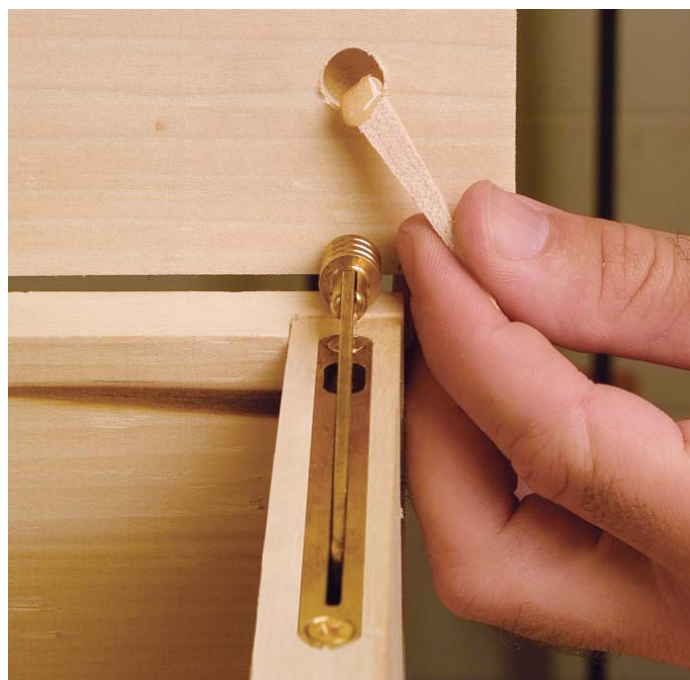
**Straight or curved.** The straight support can be used on the left or right side of the chest. The curved form designed for shallow chests is nonreversible. Mount these supports exactly in the location specified in the instructions to ensure that the lid closes fully.

### A DECORATIVE SUPPORT

This solid-brass Brusso support is for small and medium chests. It consists of a hanger glued into the lid, an arm and a housing mortised into the chest's side. As the lid is opened or closed, the arm slides out of or into the housing.



**Rout a mortise.** With a  $\frac{3}{8}$ -in. spiral-cut router bit set to the depth of the support and a fence installed to guide the router, cut the mortise into the chest side.



**Secure the lid support.** Use epoxy to fasten the hanger to the lid.

## COMBINATION HINGE AND LID SUPPORT

This may not be the prettiest piece of hardware you'll ever install, but when it comes to ease of installation and use, combination supports win hands down. Made of brass-coated steel, they mount to the back and each side of the chest and to the underside of the lid. Friction joints support the lid at any angle until fully open at 90°.



**A one-piece hinge and lid support.** These hinges allow a slab-style lid to clear the rear edge of a chest and remain open at 90°.

## SOURCES OF SUPPLY

The following catalogs specialize in period hardware, providing items that are not only historically accurate but also accurately made. This often requires handwork, so the hardware can be expensive; however, I am always willing to pay the long dollar for quality.

**HORTON BRASSES** (800-754-9127; [www.horton-brasses.com](http://www.horton-brasses.com))

**VAN DYKE'S RESTORERS** (800-558-1234; [www.vandykes.com](http://www.vandykes.com))

Other catalogs offer a broader range of hinges and supports. The hardware carried by these sources is usually well made but less historically accurate, so it is usually less expensive.

**LEE VALLEY** (800-871-8158; [www.leevalley.com](http://www.leevalley.com))

**ROCKLER** (800-279-4441; [www.rockler.com](http://www.rockler.com))

**WOODWORKER'S SUPPLY** (800-645-9292; [www.woodworker.com](http://www.woodworker.com))

**WOODCRAFT** (800-225-1153; [www.woodcraft.com](http://www.woodcraft.com))

## Safety lid supports

For chests that will be used by children, such as a toy chest, consider lid supports that give continuous opening and closing tension to prevent small fingers from getting squashed. Such supports include versions for attaching to the left, right or center of the rear of the chest. They must be mounted in the correct location to make the lid close exactly. Some models require you to match the support to the weight of the lid so that the spring in the support closes the lid slowly.



**A mounted support for each side.** This type of safety lid support is designed for a specific side of the chest. Properly installed, it won't let the lid fall.



**A single center-mounted support.** The weight of the lid needs to be matched to the strength of the support's internal spring.