

Then you can glue and nail the bottom to the partition's wall and nail the cleats to the inside of the carcass that support the bottom.

Nail the cleats to the inside of the case. I used 2d nails here – you don't want the tips of the nails poking out the front of your box.

Fitting the Lock

Confession time: No one has ever taught me how to fit a lock. I have always done it by instinct, feeling along in the dark until the thing fit and worked (after a good deal of fussing).

So reading the directions in "The Joiner and Cabinet Maker" was a real revelation. As a result, fitting the lock for the Schoolbox was straightforward, fast and simple. That's the good news. The bad news is that I don't have anything to compare it to except my own self-taught ham-handed cave-carving methods. So you're not going to get anything to compare Thomas's methods to.

In any case, this method works great. Here we go. The key to everything with setting the lock is the pin that the key turns on. Yes, the keyhole is important, but not as important as the location of the pin. Let this square piece of brass guide you and you'll be fine.

Find the centerline of the front of the Schoolbox and strike a vertical centerline near the top. The line need only be 1" or 2" long. Now you want to bore a scant hole through the front that the pin will push into (that's why the pin is proud of the lock mechanism). You can measure this location, as Thomas did. Or you can line up the top of the lockset with the top of the carcass and push the pin into the soft pine. Then set the lockset aside and use a birdcage awl to bore a hole straight through the front of the box, where the pin should go. When you break through to the inside of the box, try to fit the pin into the hole in the front of the box. Widen the hole on both sides until the pine holds the pin right where it will be in the end.

Now mark where the top plate of the lockset will fit in the top edge of the Schoolbox. Working from the front of the box, press the pin into your hole. Clamp the lockset in place and trace the extents of the lockset onto the top edge of the Schoolbox. Use a square to help.

Now you want to mark out the width of the top of the lockset's plate on the box. Set your marking or cutting gauge to the width of the plate and use the gauge to connect the distance between the two pencil lines you just struck. The mortise for the top plate of your lockset is now ready to be wasted away.



Bore a hole through the front of the box using a birdcage awl. The sharp arrises of the awl will bore through the front. Barring that, drill a hole that is smaller than the pin in the lockset and test the fit.

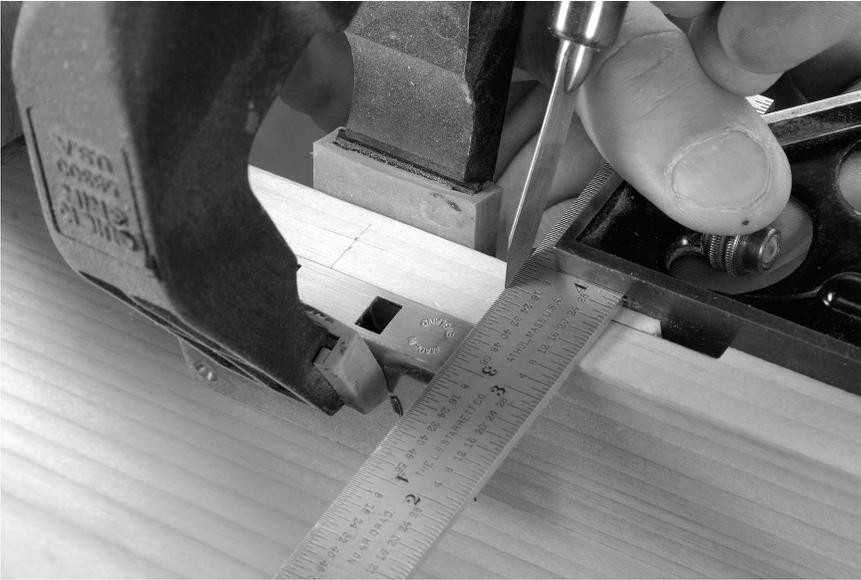
To remove this waste, score it with a chisel that you drive with taps of your mallet. You can then remove the waste with the chisel or use a router plane to ensure the depth of your mortise is consistent.

Now push the pin of the lock into the hole in the inside of the Schoolbox. The works of the lock will butt against the front piece. Trace around the box that holds the works. Measure the thickness of the lockset and mark this as the finished depth of your lock's mortise. You can chisel out this recess, or you can saw its extents, then chisel it.

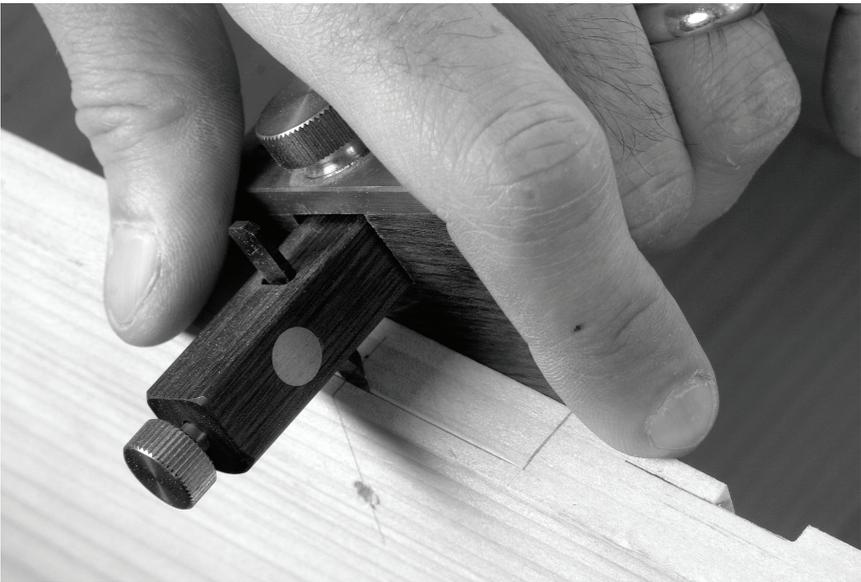
Use a fairly thick pencil lead to mark around the works of the lock. The corners of the lockset might be rounded over during manufacturing, and a thick pencil will actually give you a more accurate line than a skinny pencil lead.

The rest is easy. Press the lock into this mortise and trace around its back plate. Then waste away this area using the same techniques discussed above. If you measured carefully you should have a full-mortise lock that fits completely flush without thinning the front of the Schoolbox any more than necessary.

Use some small files to enlarge the hole for the key. Use a rattail file to enlarge the hole around the pin. Use a flat file to make room for the



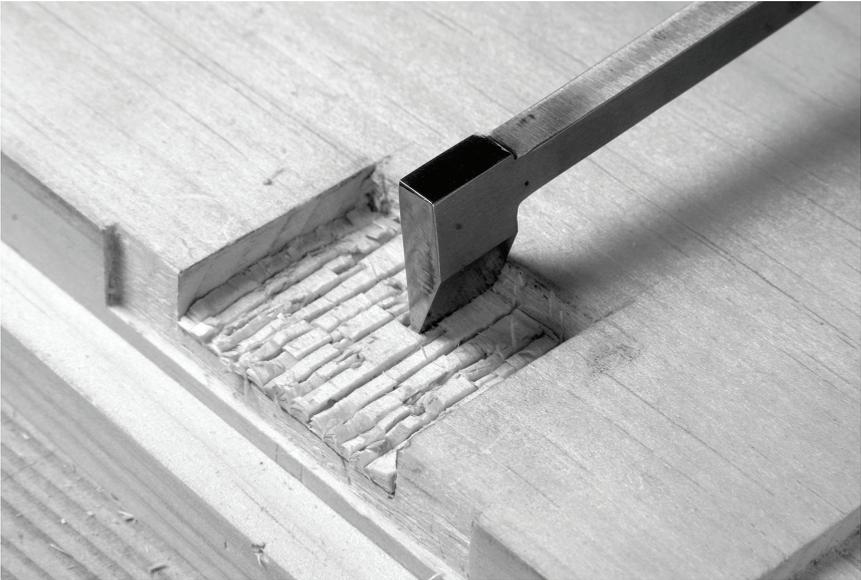
With the lockset in place, position your square up to the extents of the top plate and trace those lines on the top edge of your box.



Here I'm using a cutting gauge to mark the front edge of the lockset on the top edge of the box. Then measure the thickness of this top plate and mark that on the inside of the box. Start wasting away this shallow mortise.



Router planes excel at this type of detail work. When you need mortises that are exactly the same depth (such as matching hinge mortises), a small router plane is the tool for the job.



A drawer-lock chisel is great for this sort of close-quarters work. Score the waste with the drawer-lock chisel then remove the scored waste with a bench chisel by working from the top.

rest of the key. It doesn't have to be perfect if you are going to cover the keyhole with an escutcheon plate.

Screw the lockset in place and fetch the steel hinges. They need to be installed in the case before the lid is affixed.

Bend and Screw the Hinges

Good luck finding steel hinges for this project that have the right look and bend in the right place to fit in the partition. I was unsuccessful in finding some off-the-rack hinges to make this part easy. But altering your hinges to fit is easy work – the barrier for most woodworkers is that hinges are made of metal and that can sap your confidence.

Don't let it. There are lots of cool steel strap hinges out there that are sold with straight-as-an-arrow leaves. Bending them is simple work with just a metal-jawed vise and a hammer. If you still have some trepidation, purchase an extra hinge to practice on.

These hinges are placed using the same rules for placing the cross-strengtheners on the Packing Box. First calculate the overall length of the box. Position the hinges so their centerlines are half this distance apart.

The hinges are recessed into the top edge and face of the back of the Schoolbox. First, cut away the notch on the top edge of the box for the hinges. Install the unbent hinges into the mortise using the screw hole that is nearest to the hinge pin. Then mark where you want to bend the leaf. Mark your bending line underneath the hinge, right up against the back of the box. Remember: It's not like folding paper. You need to allow for the thickness of the leaf when bending.

Secure the leaf in a metal-jawed vise so that the leaf you want to bend sticks up from the vise. Clamp the jaws right below the line you marked. Use a hammer to tap the leaf to shape. You want to bend the leaf so that the leaf needs to be recessed into the back.

Hold the hinge in its mortise again. Then trace around the hinge to mortise the hinge flush to the inside of the case (this will allow the partition to be removed). Waste away the area where the leaf should go.

Screw the hinges to the carcass of the Schoolbox and get ready to attach the lid. The lid should be slightly oversized because things might shift around during installation. Plus you never know how the slop in the hinge barrels will affect how the top fits.

Set the Schoolbox on its back and elevate it on some spacers. Position the lid on the benchtop and let the hinges fall onto the lid.