



Metal hardware will age and develop a patina over time. This can be both good and bad, depending on your desired results. As with wood, you have the choice of hurrying or almost stopping the aging process of metal hardware. Additionally, beyond aging, you can create some unique finishes on hardware that will make your custom furniture even more distinctive. Whether you just want to age

Customize your hardware

ELEVATE HINGES AND PULLS THROUGH AGING AND PATINATING

BY CHRISTIAN BECKSVOORT

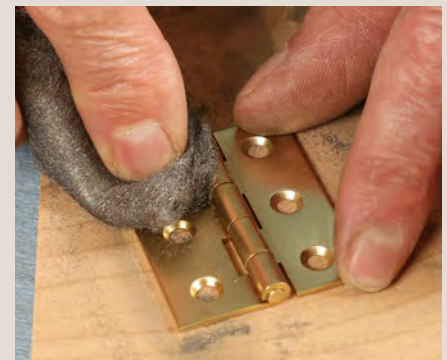
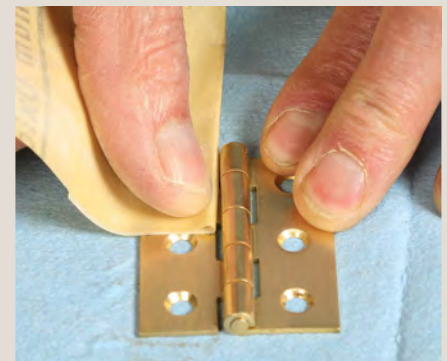
hardware or to create a custom finish on it, there are simple ways to do both with commercially available products or ingredients you can find in your kitchen pantry.

If you are using hardware with screws, remember you must treat the screws the same way and at the same time as the rest of the hardware. Nothing looks more obvious than bright brass screws on aged or patinated hinges. It's also worth mentioning that I start with solid metal hardware without any factory



Bright and fresh

If your work calls for light, shiny brass you can polish it up and add a clear coat on top. This will arrest the natural aging process.



Sandpaper and steel wool. Sand the hardware with 220-grit sandpaper to remove any mill marks that may be left on the metal. Then rub with steel wool.

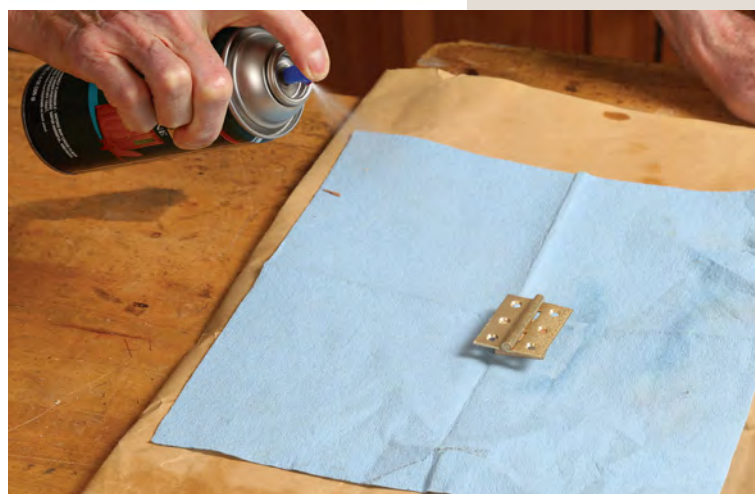


finish whatsoever. So with all these techniques, I'm starting with bare brass, zinc, or steel.

I begin all these treatments by prepping the hardware. I sand it with 220-grit sandpaper to get rid of mill marks, and then I rub it with 0000 steel wool.

Stop aging in its tracks

Before we talk about aging or patinating your hardware, it's important to mention that sometimes you'll want to do the opposite and



Spray on a finish. Apply a clear coat for UV protection. Becksvoort sprays a light coat, waits until the finish is fully dry, lightly buffs with steel wool, and then applies a second light coat.

Kitchen pantry treatments

You can get remarkable results using common household items such as coffee grounds, ammonia, salt, and apple cider vinegar. The results are somewhat unpredictable but as beautiful as they are unique.

COFFEE GROUNDS



The daily grind. Nestle your hardware in wet coffee grounds to create a dark, slightly mottled effect on hardware. Becksvoort wraps them right in the coffee filter, and then inserts the filter into a resealable plastic bag and waits.

AMMONIA AND SALT



Ammonia, salt, and paper towels. Place a folded paper towel in the bottom of an airtight plastic or glass container. Pour in enough ammonia to saturate the paper towel. Place the hardware on top and coat it with more ammonia. Generously shake salt onto the hardware and cover it with another paper towel and some more ammonia on top of that. Seal the container and let the concoction sit for 24 to 48 hours.

APPLE CIDER VINEGAR AND SALT



Apple cider vinegar and salt. Before treating the hardware, clean it with denatured alcohol. Mix apple cider vinegar and salt, at a 3:1 ratio in a plastic bag. Don't make too much solution; you don't want the hardware to be submerged in it. Places where the bag sticks to the hardware and restricts the solution produce nice variations in the finish. Leave the hardware in the mixture overnight. Remove it and gently brush off any salt without brushing the finish away. When it's dry, spray on a clear coat.





Unearth the treasure. After two to four days, unwrap the filter and pull out the hardware. Wipe off the grounds, let the metal dry completely, and then add a clear coat.



Uncover the goods. After 48 hours, remove the hardware from the ammonia and salt solution and wipe off the excess salt. When the metal is completely dry, clear-coat it.



keep that shiny new metal looking youthful. To prevent oxidation, the usual method is to add a layer of protection on top. Paint or spray the metal with a sealer such as lacquer, or even polyurethane, something with a UV blocker. For outdoor exposure, the sealer will need to be renewed every few years.

Aging naturally

Brass, the most common hardware material, darkens naturally through use and oxidation. If you want your brass to age naturally, you don't have to do much. Simply sand and clean the hardware, and then install it. From there

let nature take its course. The brass will darken over time.

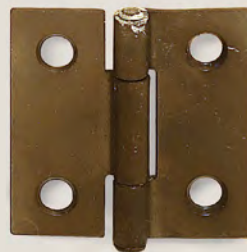
Unique, household-recipe finishes

I've used a few recipes to get some interesting finishes on my brass hardware. If you have ammonia, salt, apple cider vinegar, or coffee grounds, you can do the same.

Brass can be patinated with a solution of salt and apple cider vinegar. Mix about one part salt to three parts vinegar, add the hardware, and place it in a sealed glass or plastic container. Leave the hardware in the solution overnight. When you remove the metal it will be

Heat and linseed oil

Heat can darken steel hardware, and linseed oil can add richness to the darkened metal. From left to right, these zinc hinges are: clear-coated, torched with a clear coat, torched with linseed oil. When heating zinc, always work in a well-ventilated area and wear a mask or respirator.



Zinc prep. Use sandpaper and steel wool on zinc hardware just as you would brass.



Add heat and quench. Using a blowtorch on a fireproof surface like this piece of granite, heat the hardware until you get a color you like. Use pliers to pick up the hot metal and dip it in linseed oil. Set it aside to dry.



Just linseed oil. The bluish cast of wrought iron gets even more depth when you wipe on a coat of linseed oil.

a swirl of green and copper. Brass is a combination of copper and zinc, and the apple cider vinegar really brings out the copper.

A treatment of ammonia and salt produces a textured, rich, colorful pattern on brass. Make sure to use a container that seals well. Leave the hardware in the container for 24 to 48 hours. Once you extract it and it dries, add a clear coat to it.

Reuse your morning coffee grounds to create a mottled, darkened brass finish.

Paint it black, or any other color

Of course, there is always the option of painting your hardware. The key is prepping and a light touch.



Clean and polish. Before painting, it's important to remove any oils from the metal. Soak the hardware in acetone for a few minutes. Remove the hardware and polish it with oil-free steel wool.

Simply bury the hardware in the grounds and seal it in a plastic bag for three to four days. Take the hardware out, let it dry, and then add a clear coat.

Things are heating up

Steel hardware is a different animal. If you are using hand-wrought steel, with that nice bluish patina, you can preserve that look with a few coats of linseed oil. Most "steel" hardware sold today is either zinc plated or stainless. Zinc can be burned off using a propane torch; use pliers to hold the hardware. Let the metal cool and if you like the color you can clear-coat it. But for a darker, richer look, the hot metal can be quenched in linseed oil.



Mini spray area. Use paper or plastic to protect the work surface, and elevate the hardware on blocks or dowels while spraying so the paint has a place to drip off without pooling. Becksvoort opts for a couple of light coats rather than one heavy one.

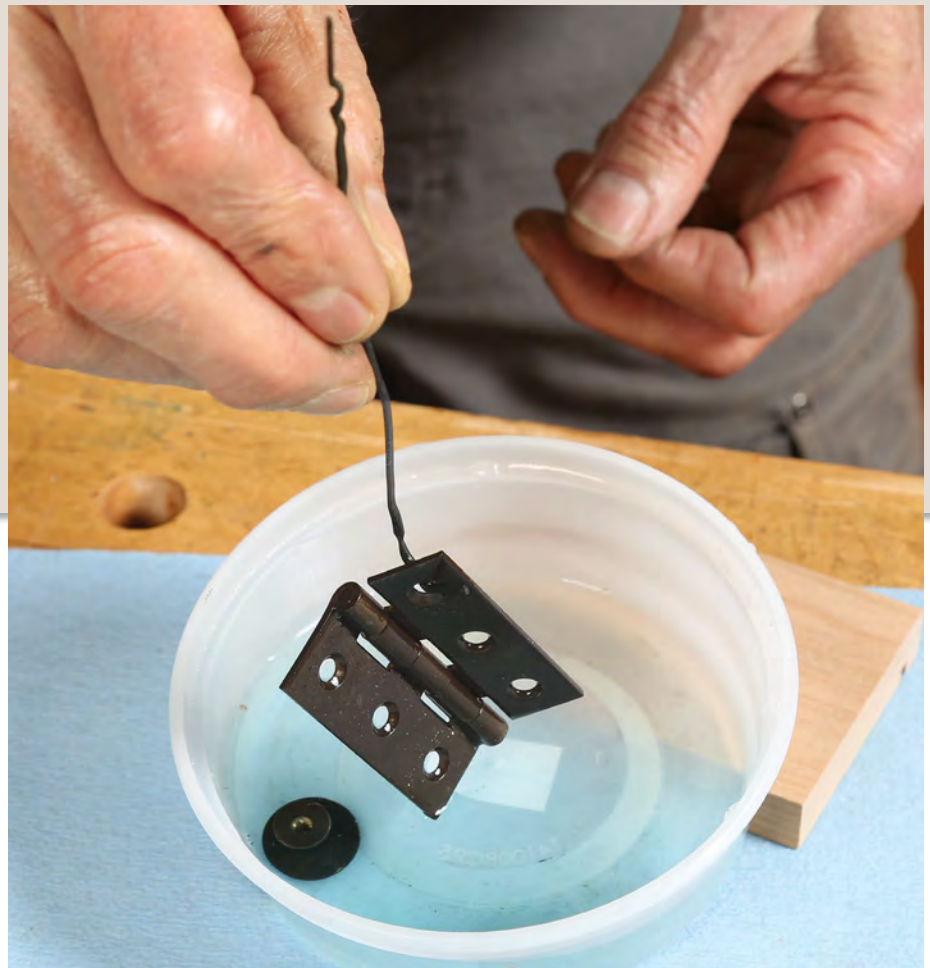
Patinating chemicals speed things along

Commercially available chemicals can give you more control and consistency when antiquing your hardware. Two different types are available, a dipping solution and a paint-on solution. The results can range from light to dark, and you can monitor progress by eye.

DIPPING SOLUTION



Dipping method. There are a number of brass agers on the market that contain selenious acid. Some must be diluted and others can be used straight out of the bottle. Follow the manufacturer's directions. Becksvoort dilutes the aging solution, pouring it into water.



There's always paint

As a last resort, you can paint metal hardware. Oil-based enamel sprays are best. A medium, dark, or charcoal gray or even flat black will look good. But you can choose any color you desire. On the rare occasions that I've painted hardware, I've added a clear finish poly or lacquer over the paint for protection.

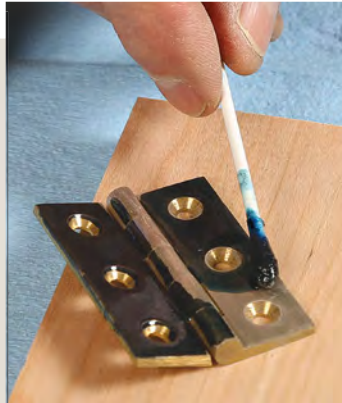
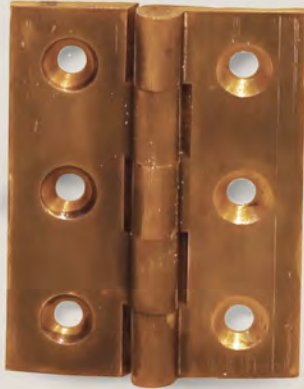
Chemical intervention

There are a lot of aging solutions on the market that will speed up the antiquing. These, usually containing selenious

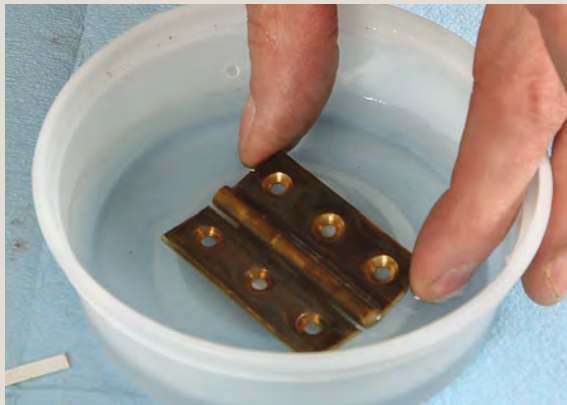
Remove the hardware. When you see the color you want, pull the hardware out of the solution, and then rinse it with water. Once it's dry, you can spray a clear coat on it.

Patinating chemicals continued

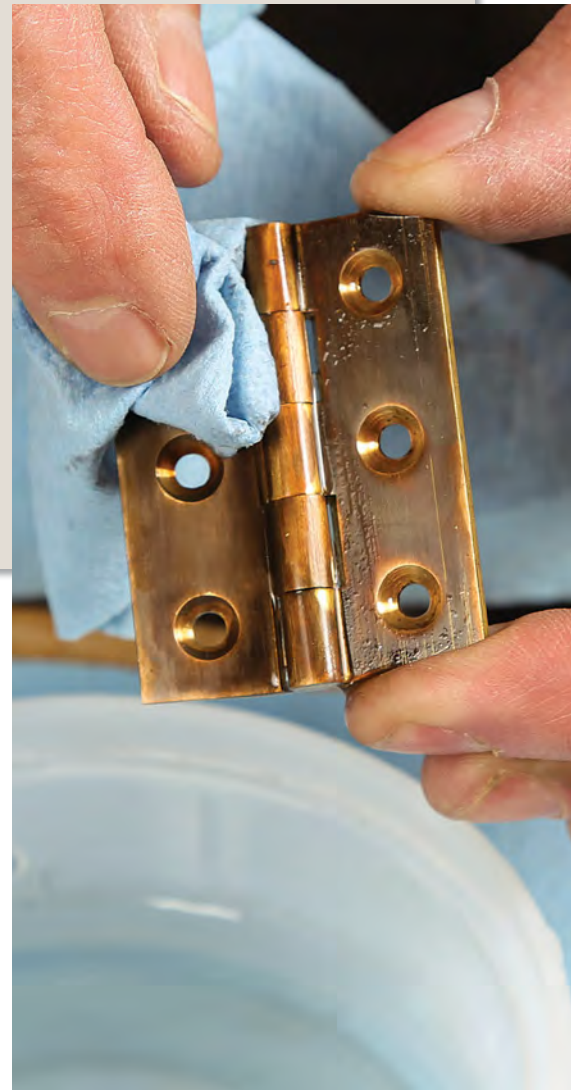
PAINT-ON SOLUTION



Paint it on. With Brass Black, you can use a cotton swab to apply the solution to the hardware and leave it on for a minute.



Rinse it off. Wash off the hardware with cold water, and then wipe it dry. Repeat this process until you achieve as dark a color as you'd like. After the metal is dry, spray on a clear coat.



acid, do a nice job, but require care and gloves. They allow you to get a more traditional aged look than the household recipes. And it's easier to get consistent, exactly repeatable results with these types of products.

The solution is mixed with water (often 1:5 or 1:10), and the clean brass is submerged in the mixture in a container until the desired color is reached, then dried. Two or three dips in a stronger solution will turn the brass black. There is also a paint-on product I've used called Brass Black (selenious acid and

phosphoric acid) that works in the same way as the dipping solution, but you paint it on, rinse it off, and then repeat if you want a darker color.

Final finishing

With all the hardware I age or patinate, I always top off the finish with a clear coat for added protection from scratches that could show the difference between the raw brass and the altered finish. □

Contributing editor Christian Becksvoort makes furniture in New Gloucester, Maine.