

A Visit to the Design Doctor

Hank Gilpin has the answers for 3 frustrated furniture makers

BY MATT KENNEY



Constructive advice. Stephen Harding (left) drove up from Delaware to spend a day with Hank Gilpin, who helped him improve the design of his bookshelf.

There are two big challenges in furniture making: mastering the craft's tools and techniques, and developing one's sense of design. Many of us spend most, if not all, of our time tackling the first. That's a shame, because all the technical skill in the world cannot save an unattractive piece of furniture.

That's what led me to ask Hank Gilpin, an accomplished furniture designer and maker, to help some of our readers by critiquing furniture that they had built and drawing an improved version of each piece. He gladly agreed, and I posted a call for submissions on FineWoodworking.com looking for a few brave souls with interesting furniture and thick skins. In the end, Gilpin picked three pieces, made by Mike Flaim of Milford, Ohio; Stephen Harding

of Newark, Del.; and Brian Havens of San Jose, Calif. Harding was close enough to drive up to Gilpin's Rhode Island shop for a face-to-face session.

You might not envy these three. After all, many of us leave a part of ourselves in every piece we build, and criticism about something we have such a personal connection to can sting. But that's not the way they see it. Harding was particularly pleased with the outcome of his day with Gilpin. As he listened to Gilpin's advice, he began to understand how to free his sense of design, and says that he left energized, ready for his next project.

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Consider every detail



BEFORE



According to Gilpin, Stephen Harding's bookshelf with drawers is a case of unrealized potential. He liked the basic design but thought it fell down on its details. For example, Harding used quartersawn stock for the shelf and the lower rail. As a result, the front edges of these parts

have unappealing plainsawn grain. Harding also made some missteps in construction. The grain on the walnut drawer dividers runs in the wrong direction, so their movement runs counter to the movement of the shelf and lower rail. After meeting with Gilpin, Harding said he learned two big lessons. First, Gilpin told him to draw more before he begins to build—up to 100 (!) sketches for every piece—as he considers and refines every detail, which is lesson No. 2.

GILPIN'S TAKE

The **sides should be proud** of the shelf and lower rail. Even if you get them flush initially, they eventually won't be because of seasonal movement. And accidental details like that are a sign of poor planning.

The shelf and lower rail should have a **true curve** on their front edges. Harding left a flat in the center of the curves to match the drawer front.

Cut the **drawer fronts from a single board** for continuous grain from side to side.

The **sides should have a consistent taper**, beginning just above the shelf and continuing to the top. On the original, the front edge is thinner than the back.

An arc on the top of the sides adds refinement.

The **contrast** between the dark brown end grain of the walnut drawer dividers and the red-oak drawer fronts is **too strong**. Make the dividers from red oak instead, **and change the grain direction** to vertical so that the dividers move with the other parts rather than against them.

Use **riftsawn boards** for the shelf and lower rail, so the grain on the top and the front edge is straight. The flatsawn grain on Harding's piece is too bold.

The through-dovetails are a nice touch, but **use three tails rather than two**.

For a sturdier base and a more refined look, **give the sides feet** by beveling the inside face and cutting an arc into the bottom.

Steer clear of the standards

For this audio equipment cabinet, Mike Flaim took design cues from a similar piece his wife had seen in a catalog of mass-produced furniture. As a result, the cabinet lacks personality. All of the pieces visible from the front are the same width. Even the negative space at the bottom is roughly that same width. Gilpin's simple solution was to vary the widths. He would also taper the legs and give some shape to the lower rail to further enhance the custom feel of the piece. The varied color of the parts, made



BEFORE

ORIGINAL

Lacking variety in the dimensions of its parts, the cabinet looks mass-produced.

Increase and bevel the overhang.

Top and shelf appear to be the same thickness.

These parts are close to the same width as the space beneath the cabinet.

Raise the pulls so that they are easier to reach.

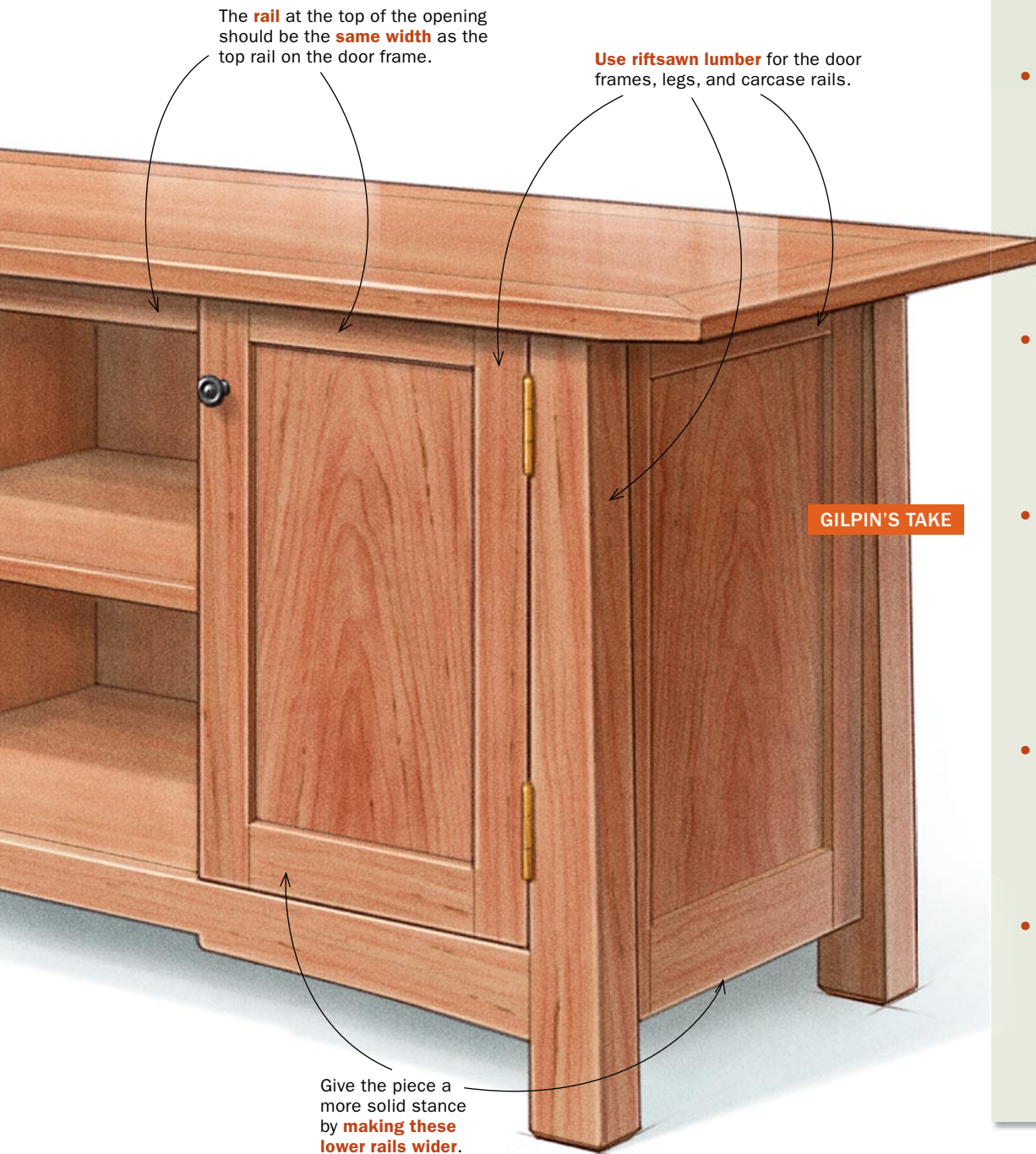
The doors should close over the top rail.

Taper the legs, leaving them slightly wider at the bottom.

Lighten the piece by **adding a slight curve** to the bottom edge of the lower carcass rail and **terminating the taper in a step** that transitions to a narrower section in the middle.

Make the shelf a bit thinner.

from multiple boards, adds to the factory feel and drowns out the beautiful cathedral grain of the door panels. Gilpin recommended finding a thick board large enough for all of the most visible parts so that the color would be consistent. That would also allow Flaim to control the grain on the door frames especially. Using riftsawn lumber, with its straight grain, would cause the frames to step back from the door panels, rather than compete with them.



Furniture design, the Gilpin way

For the better part of a day, Gilpin discussed design and technique with Harding, offering him some great general advice on both counts. Here's a distilled version:

- Design to please yourself, regardless of who the client is.
- Limitations are good. It's far easier to design a cabinet to hold three specific pieces of pottery that will be hung in the kitchen and made from that specific stack of cherry in the shed, than it is to design "a wall cabinet."
- Be deliberate about every part. Nothing should be accidental or done after the fact. Ad-hoc design choices look sloppy and out of place.
- Engineer as you design. Open a book about joinery and consider how parts will be held together. Every detail of construction should be worked out by the time you're done designing.
- Creativity begins with a question. Ask yourself, "What can I do to make this more interesting, more fun, or different?"
- Keep complete control over grain and color. This starts at the lumberyard, so know how to read end grain and what it tells you about how the face and edge grain will look.

Less is more



BEFORE



As Gilpin pointed out to Harding, the difference between good and great furniture is

often in the details. However, it is possible to overdo them. That's the case with the jewelry cabinet that Brian Havens made for his wife. There are three dramatic but competing elements on the front: the veneer, the door pulls, and the inlaid Japanese characters. Gilpin advises designers to resist the temptation to overload a piece with dramatic focal points. He said Havens would have been better served by choosing two of the three. Or better yet, turn the inlays into door pulls! Gilpin also noted that the base and cabinet seem out of synch, as if the cabinet was placed on a low table that wasn't part of the design and just happened to be there.

Clean up the front by removing one of the three details. One option is to remove the Japanese characters.

GILPIN'S TAKE

Another option is to use the letters as pulls.



Thicken the ebonized trim in keeping with the overall proportions of the piece.

Widen the base so that the piece is not top heavy.

Leave the thickness of the cabinet bottom as is.

Split the apron in two and add two vertical dividers. These pieces tie into the thickness of the other ebonized elements.

Make the legs thinner with a more graceful curve.

