designer's notebook

Draw, draw, and draw some more

BY MICHAEL PEKOVICH

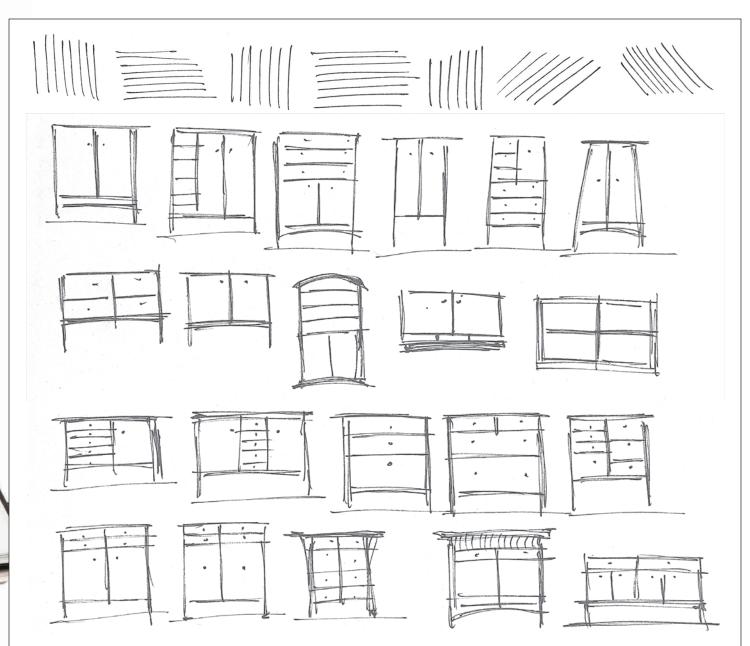
hen studying furniture making in college, I had gotten to the point where I'd make a project per semester. At the start of one semester, my

instructor suggested that instead of making one piece, why not spend the semester designing furniture instead of building it. I was a little hesitant because my joy was in building and the school shop was the only access to a woodshop that I had. Still, I decided to give it a go. However, after the first design was complete, I dropped everything and began to build it, and there went the semester. Wisdom is wasted on the young. It's taken a few years, but I'm finally putting that idea into practice.

Today, I have a number of sketchbooks cluttering my house, each one with an ink pen threaded through its spine. In them, I make quick, small sketches, with just a few lines to conjure the idea of a piece. This all started a while ago, when I was in bed with the flu. I occupied my time by filling up a sketchbook with drawings, each maybe an inch squaretoo small to try and sweat the details, but enough to capture an idea. A rectangle became a cabinet or a bookcase. A vertical line became a divider, horizontal lines became shelves. The combination became doors or drawers, so that in quick, shorthand form, a dozen iterations of a piece could be conjured in just a few minutes. Fast, fast, fast. And fun.

When I recovered from the flu and revisited the sketchbook, my first thought was that I'd just designed more furniture than I could build in a lifetime. It was a depressing thought, but as I looked further, it became apparent that not all of the designs were worth building. A few here and there, however, caught my eye. Maybe it was just an errant squiggle of a line that suggested something more by accident than anything else, so I drew a few more sketches to try and capture that spark of an idea. And once I got hold of it, it was just a matter of fanning it into a flame and carrying that energy through the rest of the building process. Drawing has now become a habit, and instead of

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To capture a spark, start small

A small sketch has a lot going for it. It's fast, so you can knock out a bunch in one sitting. You can fit a lot of them on a single page, which saves paper and has the added benefit of allowing you to look at a lot of ideas at once. Small doesn't let you get lost in the details. You have room for only the basic structure of a piece, which is a great place to start.

You may not think you can draw, but you can draw well enough to design. Here's how to start: Get a small blank sketchbook with good paper: 6x9 is big enough, but you can go bigger if you'd like. My favorite pen is a Pigma Micron archival ink felt-tip pen.

Start by filling a page with stacks of short horizontal lines, maybe an inch or so long. This is important because you can draw the lines with just a flick of the wrist. Straight and parallel. Now try some vertical lines of the same length. Quick but accurate, and loosen up on that grip a bit—this is sketching, not engraving. Now try diagonal lines in each direction; don't be afraid to rotate your sketchbook to make it easier.

Now you're ready to draw some furniture. Start with a tall rectangle and then subdivide it in as many ways as you can think of. It could be a bookcase or a tall cabinet. It could have drawers, doors, shelves, or a combination of any or all of them.

Draw until you fill up a page or run out of gas. Put it aside, and when you pick it up again, start on a fresh page. Once you have a few pages filled up, take a quick look back and see if anything catches your eye. If something grabs you, try redrawing it a few times. Play with the proportions, the spacing of the elements, and see if the idea picks up a head of steam. Then let it sit a while longer. Before you know it, you'll have a book full of ideas in various stages of evolution, and by the start of your next project, you'll already be well on your way to a great design.

designer's notebook continued

waiting until the start of a project before I figure out what to build, I now have a lot of ideas to choose from. I still have more than I can put to use, but going into a project with a design that I'm excited about is a wonderful thing.

Fanning the spark into a flame

So how exactly do you get from that blip on a page to a finished piece of furniture? The good news is that finding sense of how the piece will live in the real world. When I'm working out the scale of a project, I'll look at everything around me—a filing cabinet, a water cooler, a cardboard box (anything I can look at and say, no, that's too tall or too wide or too short or too narrow). By comparing the idea in your head with real-world objects, you can start to dial in exactly what you want. When I arrive at the ideal size of a piece, it's rare that

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the spark was the toughest part; trust it and it will get you the rest of the way home. While your idea may seem vague, it's actually more concrete than you might suspect. The first step is to focus on the function: What will it do, what will it hold, how will we interact with it? That will begin to determine the scale, proportions, and features of the piece. From there you need to get a I know the exact dimensions of it. The key is that it fit what I had in mind. With that in hand, you can begin to draw to scale.

Start with a small rectangle scaled to the finished dimensions of the piece. As an example, for a bookcase 30 in. wide by 42 in. high, start with a rectangle measuring 2¹/₂ in. by 3¹/₂ in. Now redraw your rough sketch to scale and you're on your way to transforming that idea into something real. You'll quickly know if your original vision translates to the actual proportions of the piece, and you may need to adjust your design to fit or rethink the proportions of the project.

The next step is to go full size. This might be a drawing on plywood or cardboard, or you could break out the glue gun and drywall screws and build a mockup. For shallower work like a wall cabinet, I'll often make a full-size drawing of just the front view. A drywall square and a handful of permanent markers are all you need. If something doesn't look right, turn it over and try again. For a case piece, I'll typically mock up the front and one side-you need to see it from only one angle. Stand it up and add a piece of plywood for the top and you'll have a good view. Now that you have a better view of the piece, you'll know when something's not right. The task now is to trust your eye and fix everything that's wrong with a design until you're left with only good stuff.

This is an excerpt from creative director Michael Pekovich's book, The Why and How of Woodworking (The Taunton Press, 2018).

From squiggle to scale. To see how a squiggle of an idea holds up to realworld dimensions. make a page-size drawing. A 1:6 or 1:8 scale drawing can accommodate a typical piece of furniture on a single page. Pekovich usually starts with a front view to dial in the basic proportions and then goes to a three-quarter view to get a better idea of the overall size of a piece. After that, he'll start in on a full-size mock-up.









See it before you build it

Design demands the courage to look at your work with a critical eye. That's tough to do on a project you've just spent six months building. One way to lower the stress is to work with mock-ups—something made quickly from foamcore, plywood, MDF, or rolls of butcher paper. Hot-melt glue and drywall screws hold everything together, and a permanent marker makes drawer and door layout a breeze. Quick and easy is the key: You are less likely to hesitate when assessing your progress.

Too big, too small, too narrow, too wide? Trust your first response. Don't stare at the mock-up until it looks right, just go with your first impression. Trust it. Make the changes and look again. Then forget about it. Put it in your house, let it catch you by surprise when you come into the room, and listen to those quick first thoughts before they disappear in a puff of smoke.

Even after the building process has begun, mock-ups can help dial in details of a project. This drop-front desk started as a full-size mock-up, and later a piece of plywood helped me to refine the door panel design.

-M.P.