

# THE ISLAND of MISFIT DESIGNS Chapter X 

## An Examination of Some Odd Stools (and Other) Samples.

When one of my designs is a failure, my immediate urge is to hide it like an embarrassing injury.
For many years I'd quickly dismantle the offending object and recycle its parts into something productive (jigs, swords for my children or kindling). While I was at it, I'd destroy any photos of the piece for a good shot of catharsis. I thought that purging my bad designs ensured that I wouldn't get labeled as a bad designer.

The problem is that we all start out as "bad designers." I have yet to meet anyone who was born with an unerring sense of proportion, line, value and color. These things are learned. And after designing hundreds of pieces of furniture for publication or sale, I've concluded that you can learn a lot though your failed designs.

At some point in my career I stopped burning by failures and started studying them. And I learned a lot by asking hard questions such as: Why is this not working? What would I change?

This chapter was the most difficult one to write for this book. I hope it will prove useful. Or that at least you can get a good laugh at these designs. Note: This is but a small sample of failed or near-miss designs for the book in your hands. If I published the entire lot, it would be its


A regular stool. This homage to bistorical milking stools turned out to be too predictable to be interesting. Also, it needs more splay.
own book. (Now, that would be a bestseller - " 62 Projects You Shouldn't Build! Amazingly Awkward Designs for Dumpsters, Sink Holes \& Bonfires.")

## Sir, There's a Problem With Your Stools

Ihave lost count of the number of low stools I have drawn and built for this book. As I am typing this sentence, I still don't have a publishable design. So let's discuss the derelict and flaming heaps of crap that I assembled while on my way to ... whatever is in the pages elsewhere in this book (hopefully inspiring).

The green stool (left), as I call it, was an attempt to make a full-on casual milking stool. These stools crop up everywhere in the historical record. I adore them because they look so thrown together. Like the farmer was drunk on clotted cream when boring the mortises. The legs and drilling angles aren't consistent. The seat is a weird chunk of something that doesn't have a shape you can put a name to. "Polygon" implies it might have sides. "Amoeba" suggests it's a shape found in nature.

Anyway, these irregular stools (a good band name) are difficult to design because the best ones are divorced from a pattern or plan or explanation. They look good because the maker found some legs and a seat that were somehow suited for one another.

My design brief for my stool was "rounded seat and swollen legs." I think the design failed because of a couple things. One, the components were too regular for a form that is supposed to be irregular. Two, the legs needed to be splayed out more. Maybe $5^{\circ}$ more would have done it. Who knows? When I first mocked up the stool in half-scale, one of the people in my shop said it looked totally wrong. And I listened, which I have learned is the wrong thing to do when prototyping.

I like this failed stool enough that I keep it in the shop, for now.

## For the Fish

This stool looked so good on paper that I built it twice (almost three times) - refusing to acknowledge that it was a stinker. This stool is supposed to be like a post-and-rung chair, with lots of structure to keep it strong and stable through the long haul.

One problem is that I crammed a lot of hand-cut joinery into too small of a space. Each joint's insignificant inaccuracy stacked up in the stool's 20 (!!) joints. Getting it assembled took a good deal of grunting


Too many tenons. My frrst version of this stool had so much internal tension that it tried to tear itself apart. This version wasn't much better. Twenty tenons is too many.
and core strength.
Aside from the technical problems, I think the square seat is a loser. Yes, it reflects the square shape of the undercarriage. But surprisingly, that's not how a lot of chairs and stools are made. Their seats have curves, or they are round or half-round. A square chair seat is somewhat unusual (though it does happen, and I've built some).

I hated looking at this stool - even out of the corner of my eye - and had to get rid of it. Luckily, the local window washer needed a low bench to use for cleaning fish he caught in the Licking River. So, this stool now stinks - both for real and as a design.

## Tabling This Design

The pine and poplar worktable on the following pages is another piece I had high hopes for. Based on tables in the "Tacuinum Sanitatis," a book on Medieval health practices, it seemed the perfect breakfast table. The splayed legs add stability to its small tabletop. And there's not a lot of joinery - two sliding dovetails and four holes for the legs.

The first design failure is in the legs. They are too bulky and need to be slimmed down. Plus, the transition between the tenon and the octagonal section is too abrupt - it makes the tenon look weak or, at least, out of place. This is caused mostly by the chunky legs. Once I slimmed down the legs for future versions, the transition didn't look so jarring. And I could use thinner stock, which saved some money.

The biggest problem is the shape of the table's top. It's square. Like the stool above, there is something not right with a square top or seat in these instances. Part of the problem with a square top is that it doesn't let you know which side is the front and which is the side. They look different - from one view the top looks thin and from the other view the top looks thick, thanks to the dovetailed battens.

So, when I walk up to this table, it looks different about half the time. I don't know which is "right," and this is disconcerting. It might be a personal problem. But once I made the top a rectangle and thinned the legs, the design snapped into place. It had a front face and a side.

In my head this is how architecture works. We are confused by buildings that don't have a well-defined entrance. If the table doesn't tell you how you are supposed to look at it - what is front and what is not - we are left unsure. Or we dismiss it.


At least the cat approves. This worktable has several flaws. Here you can see how the tabletop appears quite thick when viewed from this angle.


Another view. Here the tabletop looks thin. Maybe too thin. And look at those chunky legs. It hurts me.


Widebody. Stretching the width of a chair to create a settle might work in some instances, but not here.


Before the stretching. This is where the settee started, before the Silly Putty approach.

## The Same, But Worse

[^0]

A failed fix. Making the crest rail longer might have made the settle more comfortable to sit in, but I wasn't happy with the overall look.

One approach I took was to stretch my armchair design into a settee or settle. This seemed reasonable. Many Windsor settees use design elements from sackback and fanback chairs. But this strategy doesn't quite work with a stick chair.

When I mocked up this design, I quickly found the folly. It looks OK but sits like crap, especially when there are two people perched on it. The ends of the crest rail bite into the center of each sitter's spine. And one shoulder blade is left unsupported.

The only way this design works is for a single sitter who happens to be 2.5 times as wide as a normal sitter.

To fix this, I extended the length of the crest rail to completely support the backs of both sitters. But this design looked ungainly and created a lot of construction problems. So, I am back to being unsettled.

## Bigger Stool Problems

Designing the tall staked stool in this book took about 10 iterations, and it would get really boring (for me and you) to review the entire evolution from mudskipper to hominid. The general arc of the design was a typical one for me. The stool's components started out too heavy. And the details were too fussed-over.

The cherry version on the next page (at least I think it's cherry) shows this problem.

The legs are too chunky and they double-taper. The tapers begin at the point where the stretchers meet the legs. Then they taper both up and down. But they don't taper enough. In fact, you have to really look for the tapers. The front stretcher (also bulky) also has a double-taper.

This design started to look better when I removed about 1/4" from the legs and $1 / 8$ " from the stretchers. And I simplified the tapers on the legs to be a single taper. Lighten and simplify.

The seat isn't bad. The curve along the rear is nice. But it's too bulky overall. A chamfer on the underside of the seat was the fix.

The shallow curve on the front edge of the seat, however, is lame. It's vestigial. In fact, I think it distracts from the dramatic sweep of the bigger curve. Plus, it doesn't offer any comfort. And it's more work.

The mahogany stool below was a later iteration. Here I still need to lighten the legs. I also somehow made the stretchers worse. I made them too thin and turned them round. They look like pencils. After making this stool I went back to octagonal stretchers and found a good balance between pencils and billy clubs.


Too thick and curvy. This stool needed to go on a diet. And lose the curve on the front of the seat.


Wow, even worse. Shrinking the spindles and turning them definitely wasn't the fix.


Better. Here the simple tapers bave kicked in and the stretchers are proportional to the rest of the piece.


Cute, but ouch. I love the look of this chair but it is otherwise a torture device for the buman body.

## Armchair Misadventures

TThe armchair was another project that was almost a breech birth. I sketched about 20 chairs for this book and built about 10 of them to get to a design that I am (honestly) happy with. Let's take a look at some of the lowlights.

Above is where I began. It's an adaptation of a lovely chair (proba-


Comfort isn't everything. While this chair looks as inviting as a dentist's chair, it actually sits quite well. Too bad it looks its best with a flaming blanket over it.
bly Welsh) that I spotted in England one summer in a historic home. Though it has nice lines, it's uncomfortable. The back is almost straightup $90^{\circ}$, and the seat is too small. The chair feels like it's hugging you (if you are slim) or trying to squeeze your guts out (if you are like the rest of us).

I also wanted to try to simplify the construction when it came to attaching the arms to the back spindles (remember lighten and simplify?), but I went too far.

I first decided to make the arms separate from the back. This would make it easier to drill the sticks for the arms and the back because they weren't all attached. I also used a less-traditional seat shape.

The result was just terrible. The chair sits great. The back tilt is just right. The arms slope nicely back. The chair is super easy to build. But it looks like a dog's dinner. I tried reshaping the arms (they are too rectilinear as shown in the photo), but I concluded the problem is that having the arms separate from the back makes the chair look weak. And just wrong.

So, I went back to the way I built armchairs in about 2003 and started from there, trying to refine those designs.

That meant steam-bending the armbow and the crest rail. I knew this chair wasn't going to be the final design for the book because I wanted to avoid any difficult steam-bending. Avoiding a long or tricky bend would make the chair more approachable for a beginner. But I hoped that if I built this chair, then the next iteration might come to me.

I was right. This chair has a nice flow to it and is light in color, much like an early chair I built in David Fleming's class in Cobden, Ontario. And that vague memory of that old chair did the trick. I decided to use an armbow that was built up from three pieces, just like Fleming (and many old Welsh makers) did.

In fact, before I owned a steam box, I used to make chairs with a three-piece arm all the time. But I had blocked them from my mind for some reason. After that little jolt, the chair design came together in just a few days.


Transitional. This chair was the bridge I needed to build to get back to the designs I was building in 2003 and 2004.


Hey (drunken) sailor. This table never looks the same twice. I must have taken 20 photos of it to try to understand its failure to charm others.

The Tipsy Table

This simple maple end table derived from an early morning sketch. I drew it over coffee and had it built by supper. Then I showed it to a few friends. Most treated me warily, like when you show up at high school wearing red leather pants. A couple people laughed out loud. No one but me liked the thing.

Because of the angled legs, it looks unstable, but it's not. Thanks to the placement of the feet, the top is well supported, even when you press hard on a corner.

The table is a bit disconcerting to look at - it changes in appearance radically as you walk across the room. Sometimes it looks like a ballet dancer. Other times it looks like a frog trying to square dance.

My friends had suggestions as to how to change the design to make it more conventional. I decided to leave the table as it was and abandon the design. My oldest daughter uses the prototype as a nightstand. It has survived well, despite its radical geometry.

There are many more failures I could discuss. But writing this short


We'll call you, promise. It's hard to believe this is the same table in all of these photos.
chapter has been painful enough. I look at some of these designs and think I should have my woodworking license revoked. Oh wait, I don't have a license (but I do have all my vaccinations!).

The good news is that design is learned, not granted by a moistened lady or a tarnished lamp. Even if your designs start out as bad as mine, there's a good chance that you can improve them. With work, they might look like something that someone will swoon over. (Or at least not put to the torch.)


[^0]:    t times it is tempting to take a good design and scale it up or stretch it in one dimension. This rarely works for me.
    So welcome to the Settee Section of Shame in which I fail to produce a satisfactory settee design for this book. It's not for lack of trying. My sketchbook is stuffed with doodles. I just haven't doodled superbly, I suppose.

