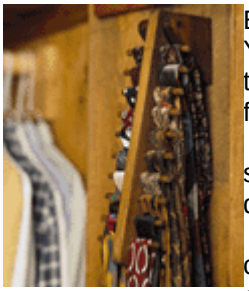
Tie Rack

A project for the dad who's fit to be tied come Father's Day

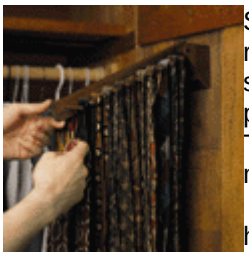


Earlier this year, two Cambridge University physicists, Thomas Fink and Yong Mao, completed their groundbreaking research into why we knot ties the way we do. Fink and Mao used mathematical models to shed light on the flips and folds of these 400-year-old fashion staples.

If it were my research project, I would have figured out how to uncoil the snake's nest of slippery silk found in the deep recesses of even the most diligent tie-wearer's closet.

That said, here's how to build a simple pine rack that swings up—to choose the perfect match to that single-stitched oxford—and down, keeping everything out of the way until the next tie day. The rack portion even lifts off the bracket, allowing closer inspection of your prized collection.

Rack 'Em Up



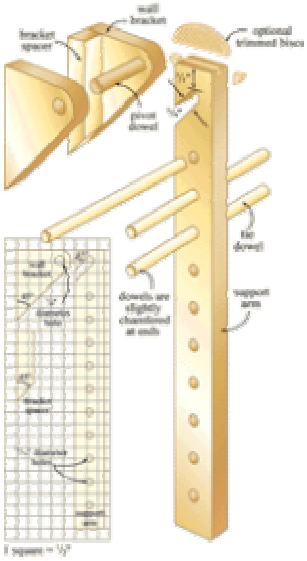
Start by laying out all the pieces of your pine. Use a quarter to mark the radius on the wall bracket. Cut out all the pieces and sand the edges smooth. If you want to reinforce the pivot point on the top of the tie bar, plunge a #10 biscuit halfway through the top, and sand it flush when it dries. This measure will put some cross-grain support at the point that gets the most stress.

Mark and drill all the holes being careful to keep them straight. Any error here will be magnified when the dowels are installed. A drill press guarantees success. Now make two cuts to complete the slot at the top of the tie bar. Finish the assembly by gluing and clamping the wall bracket together, and sliding the dowels through the support arm. A dab of glue will hold the dowels in place.

Finish it Off

When the glue is dry, give everything a final sand and stain. I used Behr's Belgium Walnut and purposely left some brush strokes in the finish to strengthen the light grain of the clear pine. Then I sprayed the whole thing with a couple coats of Flecto's aerosol Varathane. This is much easier than fiddling around all those dowels with a brush.

There is something of value that woodworkers can take away from Fink and Mao's research into tie knotting. These are the factors that mark proper tie knots: aesthetics, strength, rhythm and balance—criteria that all woodworkers should observe when building their next project.



You Will Need		
Tie dowels	5/16" dia. x 4 1/4"	10
Pivot dowel	3/8" dia. x 2 1/4"	1
Support arm	1 1/4" x 12"	1
Wall bracket	3" x 3"	2
Bracket spacer	3/4" x 1"	1
Ties	Fashionable width	20

All parts (except the ties) made using 3/4" pine