

WOODWORKER'S JOURNAL

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Classic Project



In this plan you'll find:

- Step-by-step construction instruction.
- A complete bill of materials.
- Construction drawings and related photos.
- Tips to help you complete the project and become a better woodworker.

Acrobatic Bear Folk Toy



WEEKEND WOODSHOP EASY-TO-MAKE GIFTS, TOYS & ACCESSORIES

Acrobatic Bear Folk Toy

Folk toys similar to this Dancing Bear have been delighting children for generations. We won't try to trace their origin, but we do know that this design has changed little over the years. The basic concept behind this type of toy is the use of tension (from squeezing the bottom end of the sticks together) to straighten a pair of crossed strings. Since the toy is assembled so that when the bear is at rest the strings are crossed, when the strings are tensioned the bear flips around in acrobatic gyrations. The loose pinning of the bear's legs and arms to the body results in a positively unpredictable action, which in turn produces always predictable laughter from the little ones.

The toy shown was crafted by Connecticut woodworker Dave Moretti. He used maple for the arms, padouk for the bear parts, and a birch dowel, although almost any combination of woods can be used. Heavy duty waxed dental floss works great as the string, and a few short pieces of brass wire hold the bear's parts together.

Start by transferring the bear's parts from the full-size pattern to your 1/8 in. thick stock. You can use carbon paper to transfer the pattern, or just photocopy the pattern and paste the photocopy right onto the stock. Make two each of the arms and legs. After transferring the patterns, use a 1/16 in. diameter drill bit to bore the various holes as indicated. Note that the string holes in the arms should be on-center 1/4 in. apart.

Although the scroll saw is the ideal tool for cutting the bear parts out, a coping or jeweler's saw will also work fine. By the way, if you don't have the ability to make 1/8 in. thick material, 1/8 in. thick stock, in several different wood species, can be ordered from

With the bear parts cut, next rip the pair of 1/2 in. thick by 5/8 in. wide sticks and cut the 2 1/2 in. long dowel. Drill the pair of 1/8 in. deep dowel holes, and the 1/8 in. diameter string holes in the stick ends. Make sure these 1/8 in. diameter holes are also 1/8 in. apart, on center. Glue the sticks and dowel together.

Sand, then finish the wood parts with a penetrating oil. Assemble the bear parts as shown with the two lengths of brass wire, bending the ends of the wire to hold the parts together, but making certain that the parts are loose. Now, with the bear in the position shown in Figure 1, thread the string through the holes in the sticks and bear, tie the ends together, and clip off any excess. The string should be loose, not tight.

Now, with the dancing bear toy held upright in your hand, try squeezing the bottom end of the sticks together. It won't take long and we're sure you'll have your bear spinning tricks that should insure him a berth on the next Olympic gymnastics team.

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to bore the various holes as indicated. Note that the string holes in the arms should be on-center $\frac{1}{4}$ in. apart.

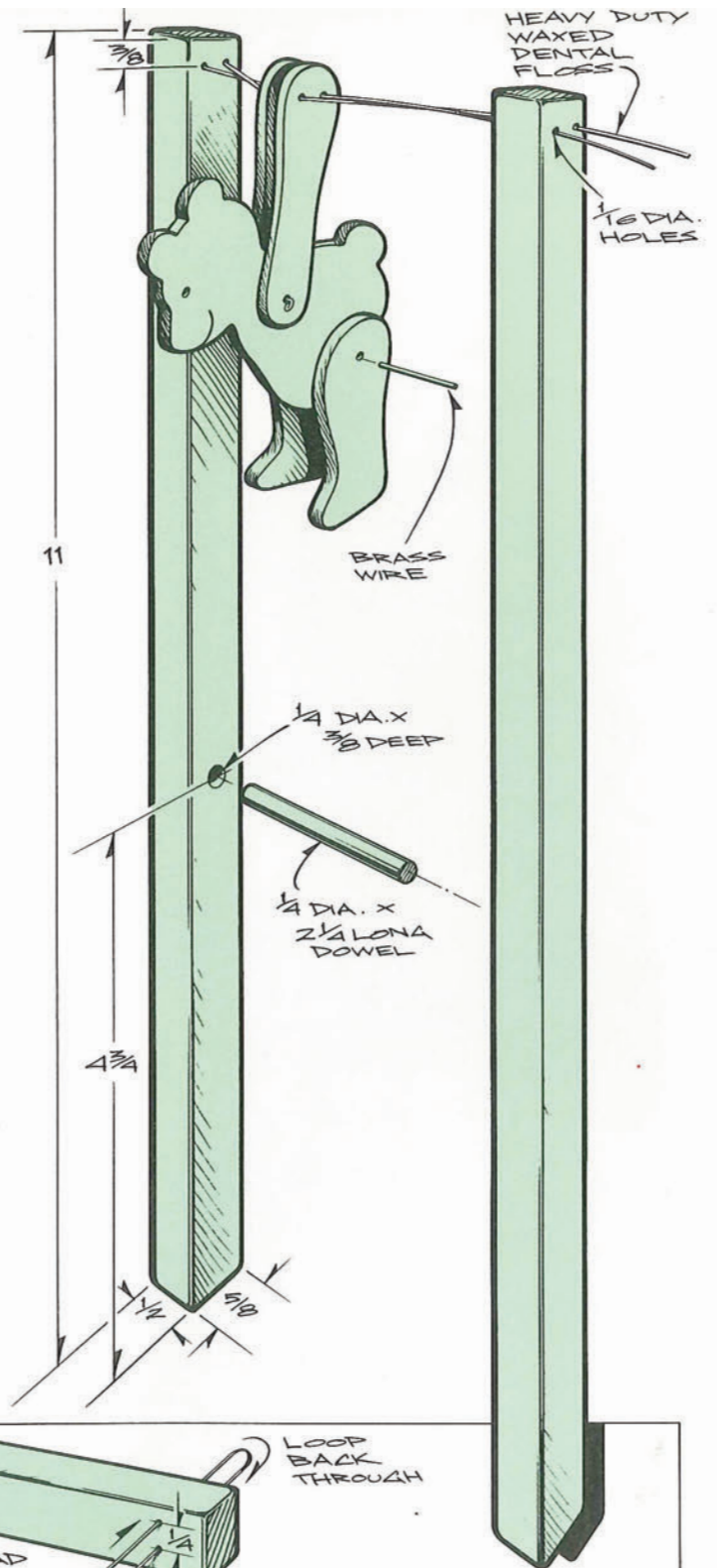
Although the scroll saw is the ideal tool for cutting the bear parts out, a coping or jeweler's saw will also work fine. By the way, if you don't have the ability to make $\frac{1}{8}$ in. thick material, $\frac{1}{8}$ in. thick stock, in several different wood species, can be ordered from various sources.

With the bear parts cut, next rip the pair of $\frac{1}{2}$ in. thick by $\frac{5}{8}$ in. wide sticks and cut the $2\frac{1}{4}$ in. long dowel. Drill the pair of $\frac{3}{8}$ in. deep dowel holes, and the $\frac{1}{16}$ in. diameter string holes in the stick ends. Make sure these $\frac{1}{16}$ in. diameter holes are also $\frac{1}{4}$ in. apart, on center. Glue the sticks and dowel together.

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FULL-SIZE PATTERN

MAKE 2 OF EACH



ALL HOLES ARE 1/16 DIA.

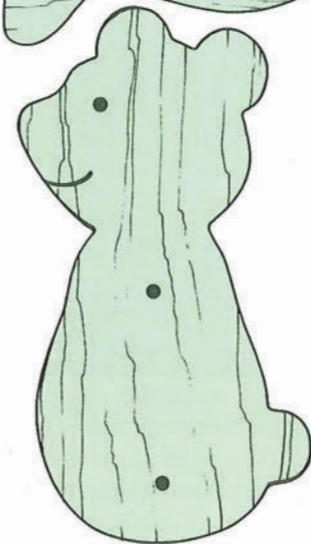
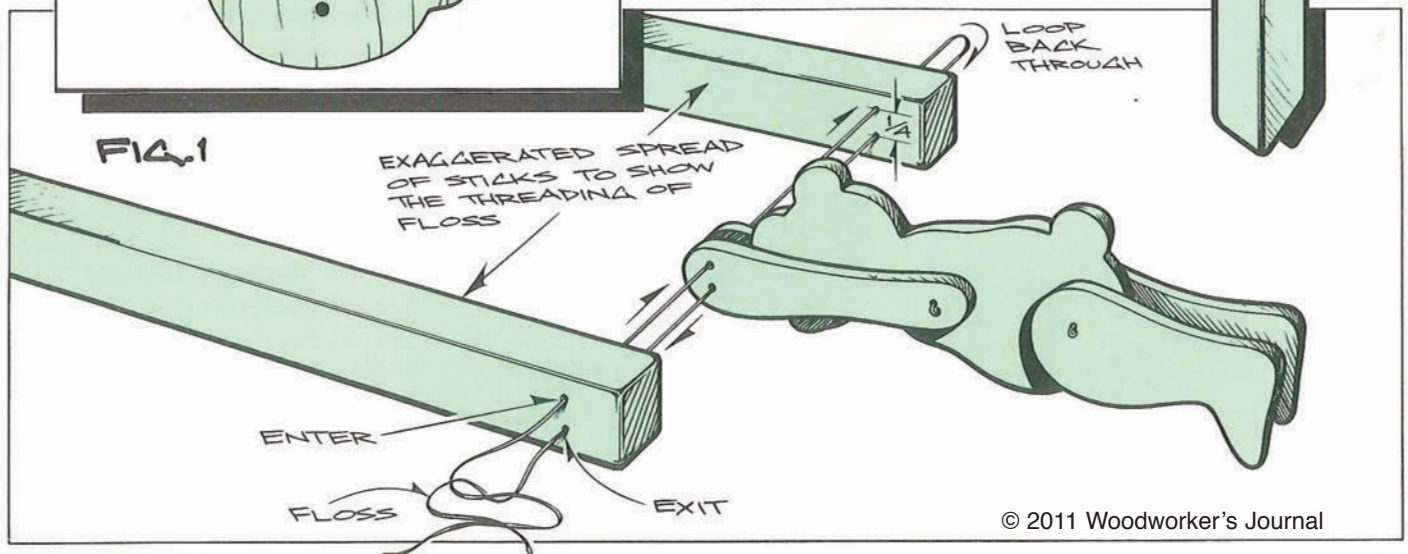


FIG. 1



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Thank you again for your purchase, and happy woodworking!

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Internet Production Coordinator