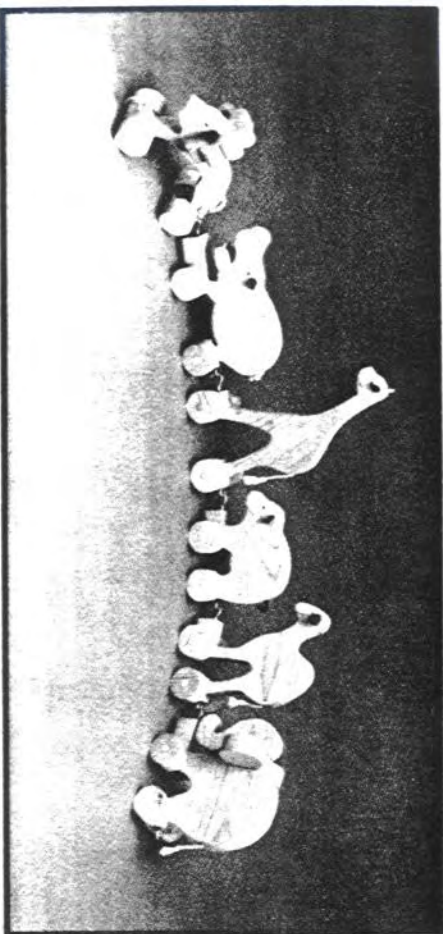
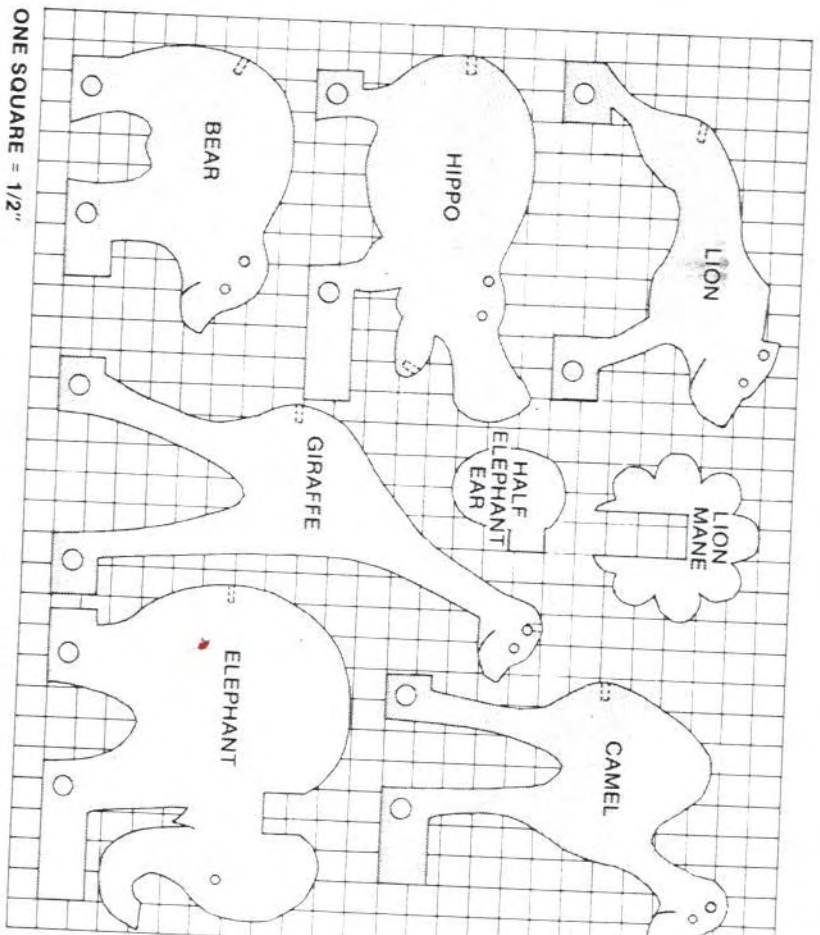


# GREATEST SHOW ON EARTH



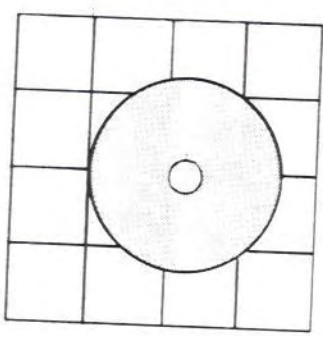
**T**he animal train has been the most popular train among toddlers. As a train, there are six designs here for different animals. But don't stop at just these designs; you can make more patterns for other animals. Pine or a suitable hardwood is best for the animals. If the toys are for a child under 2 years old, eliminate the ears, tails, and horns—these parts could be bitten off and swallowed.

Leave the stock for these toys natural or paint it with bright colors. If applying paint, make sure you prime the wood first; then use a nontoxic paint to finish. To make a really fun toy out of this project, double the size of the animals. It's not necessary to make all of them, but the ones you do make will be big and fun. Use 1-1/2"-thick stock for all the parts.



ONE SQUARE = 1/2"

ANIMAL AND WHEEL PATTERNS



## PROCEDURE

### 1. PATTERNS

Start by making patterns for the various animals. Draw 1/2" grids onto stiff cardboard or tempered hardboard; then transfer the patterns from the plans to the grids. The elephant car is just a half pattern. You can make a full pattern for the car or just trace around the half pattern twice on the stock.

For larger or smaller

animals, draw larger or smaller grids. Cut out the templates and make sure that all holes are located on them.

### 2. CUTTING

Transfer the patterns to the stock making sure the grain direction on all the animals is horizontal (except for the giraffe, which is vertical). If you've laid out all the animals on the same stock, cut the stock into blocks for easy handling. Cut out the pieces using a scroll saw or bandsaw. (A scroll saw is really the better tool because almost no sand-

ing is required after the cuts are complete.) When cutting these animals with a saw kerf—just cut into the area; then back out the blade.

After you've cut out all the animal shapes, drill the 5/16" diameter axle holes and the 1/8" diameter × 1/4" deep

holes for the giraffe horns and hippo teeth. Then drill the holes for all the ears and tails. The eyes are formed by using the 1/8" twist drill bit and drilling a hole about 1/8" deep on either side of the toy. Locations of the tails, ears, and eyes aren't critical; just put them in the general area as indicated in the plans.

Once all the holes have been drilled, glue and clamp the lion's mane and the elephant ears into place. Sand all the edges of the toys smooth, paying particular attention to splinters or sharp edges.

### 3. WHEELS

The 1-1/4" diameter wheels for this train are formed using

a 1-3/8" diameter hole saw. Use 3/4" stock for this train and 1-1/2"-thick stock for one double the size. Once you've cut out the wheels, sand them smooth. When completed, cut the axles to length; then assemble the wheels and axles to the animals with glue.

### 4. FINISHING TOUCHES

To finish the animals, cut the giraffe horns and hippo teeth to length and sand the ends. Glue them into the 1/8" diameter holes drilled earlier.

The eyes for the animals are made from brown felt. Cut out the ears and glue them into the 1/8" diameter car holes with aliphatic resin glue.

Paint the animals or leave them plain. The eyes on the animals can be painted in with a felt-tipped marker.

Finally, drill 3/32" diameter holes in each end of the animals and insert the screw hooks and eyes.

Crimp the hooks so the eyes barely fit in them, and be sure to put the hooks in the down position.

## MATERIALS

Part	Description	Pieces	Dimensions
A	Lion	1	(finished dimensions in inches) 3/4 × 3-3/4 × 6
B	Lion's mane	1	3/4 × 2-3/4 × 2-3/4
C	Hippo	1	3/4 × 2-3/4 × 6
D	Hippo teeth (not shown)	2	1/8 dia. × 1/2
E	Giraffe	1	3/4 × 5 × 8
F	Giraffe horns (not shown)	2	1/8 dia. × 1/2
G	Bear	1	3/4 × 3-3/4 × 4-3/4
H	Camel	1	3/4 × 4-1/4 × 5-3/4
I	Elephant	1	3/4 × 5 × 5-3/4
J	Elephant ears	1	3/4 × 2 × 3-1/2
K	Wheels	24	1-1/4 dia. × 3/4
L	Axles (not shown)	12	1/4 dia. × 2-3/8
<b>MISCELLANEOUS</b>			
	1-1/8" screw eyes (6)		
	1-5/8" screw hooks (6)		
	Felt (for ears)		
	Yarn or string (for tails)		