

Woodimals[®]

CREATIVE ANIMAL PUZZLES FOR THE SCROLL SAW

Jim Sweet



SCROLLSAW
Woodworking & Crafts Books

Woodimals

CREATIVE ANIMAL PUZZLES FOR THE SCROLL SAW

About Jim Sweet and Woodimals®

Jim Sweet retired from a forty-year career in the aerospace industry in 1989. He and his wife Lois took up hobbies to occupy their now jobless days. While his wife turned to sewing, Jim took up woodcrafts.

From the start, Jim wanted to sell his woodcrafts at local craft shows. It took almost a year for Lois and Jim to make enough items for their first show. But their products did not have the unique appeal that attracts attention at craft shows. At their first show, the Sweets just didn't have the "right stuff." Jim recalls, "For us, it was a real bust. In a three-day show, we made just enough to pay for our booth space. What we grossed did not even begin to account for our time or materials. It was a learning experience."

At the time, standard craft show fare included shelves, cabinets, footstools, and various decorator items, all made from wood. Initially Jim made those items, too, but he soon realized he needed to come up with a unique product. He considered and rejected several ideas before deciding to specialize in free-standing wooden puzzles.

Using patterns from various craft books and magazines, Jim made puzzles specifically for children. They were built from sturdy construction-grade materials and were painted to add to their appeal. Because the puzzles were made for children, Jim used non-toxic paints and took special care to round off the edges and eliminate all sharp corners.

Jim's craft show sales began an upward trend after he started producing the puzzles, as no one else was making them at the time. Jim, however, wasn't completely satisfied with what he was doing. To secure a new niche for himself, he wanted to make puzzle designs that were uniquely his own.

At one craft show, Jim saw a customer wearing a piece of jewelry that spelled out her name. "If it works for jewelry," he wondered, "why wouldn't that work in wood?" He tried it and



found that he could make a puzzle shaped like an animal that also spelled out the animal's name. "Since the puzzle was made from wood and it was an animal, I came up with the name Woodimal for my puzzles," he recalls.

Jim's Woodimals® have such a unique appeal he finds he can make sales in the oddest of places. A trip to the doctor's office yielded sales to the doctor, the receptionist, and an assistant or two. At his local copier shop, a woman saw him copying Woodimal® patterns, asked him a few questions, and then made a purchase.

Jim gleans ideas for his Woodimals® from sources as varied as garden magazines, glass sculptures, advertisements, and even *National Geographic* and has produced more than eight hundred patterns. For a complete list of available Woodimal® patterns, please visit www.woodimals.com.

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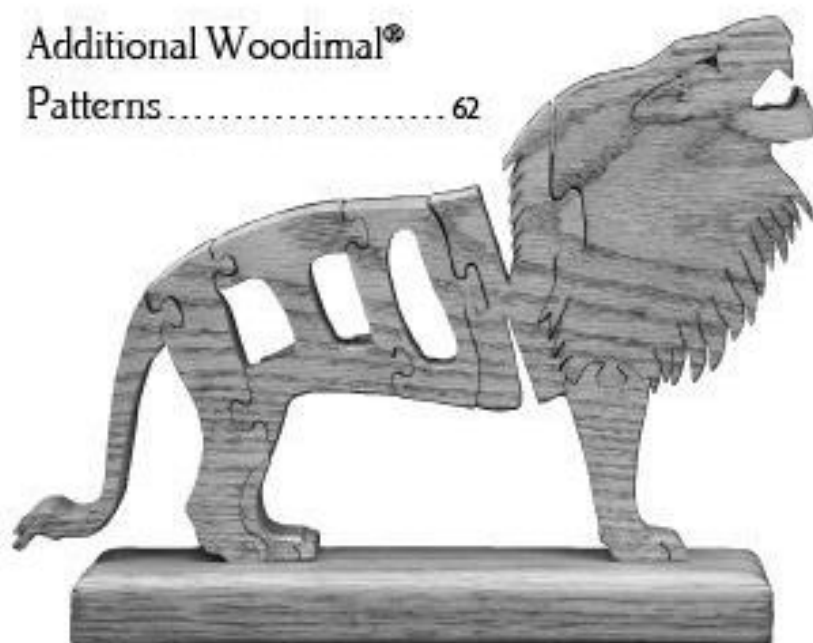
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Featured Puzzles

LION

Puzzles are always popular, but why make an ordinary puzzle when you can make a Woodimal®? To get started, make several copies of the pattern. Cut your wood to size (for easy handling) and sand both sides of the boards. (I use hardwoods to make my Woodimal® puzzles, usually oak, ash, or poplar.) Then, attach the pattern to the wood using the spray adhesive.

Check to make sure your saw blade is square to the table, or the puzzle pieces won't go together properly.

Step 1: Start cutting at the bottom of the rear leg.

Step 2: Scroll saw up the back of the leg, separating the tail from the body.

Step 3: Continue cutting along the back and around the head, leaving excess on the inside of the letter "N" and in the area of the mane.

Step 4: Cut down the front of the forward leg.

Step 5: Cut out the area between the front and rear leg.

Step 6: After scroll sawing the outline, cut between the letters.

Step 7: Drill a 1/8" (3mm)-diameter blade entry hole in the letter "O"; insert your blade through the hole and cut out the center of the letter.

Step 8: Finish cutting out the tail.

Step 9: Make your final cuts on the mane and on the inside of the letter "N" to give a ragged appearance.



Step 10: Drill the blade entry holes for the facial features (eye, and two ear details) using the #60 drill bit. Insert your blade and complete the inside cuts.

Step 11: Remove the pattern and lightly sand each piece with 180-grit sandpaper to remove any residue, rough edges, and sharp corners.

Step 12: Clean up the base with the sandpaper and rout the edges with the 1/4" (6mm)-diameter round off or ogee router bit.

Finishing

Step 1: Pour the selected stain into an old cake pan or shallow container and put your puzzle pieces and base into the stain.

Step 2: Remove the pieces from the container and place them on an old newspaper, allowing them to drain before wiping off excess stain.

Step 3: Before the pieces are completely dry, wipe them with a paper towel or a rag to remove any drip marks.

Step 4: After the parts are completely dry, assemble the puzzle and transfer details on to it using white carbon paper and a stylus.

Step 5: Using #0 or #1 liner brush and black acrylic paint or a wood burner add a line to show the second rear leg (marked with a dotted line on the pattern). You can also extend the mane down on the front leg if desired.

Step 6: Drill the 1/8" (3mm)-diameter dowel hole in bottom of rear foot and a matching hole in base as indicated on pattern. Install the dowel and mount the puzzle on base.

Optional Mane Detail

You can use a #0 or #1 liner brush and black acrylic paint or a woodburner to add details to the bottom of the mane (where the leg piece attaches). Freehand draw the details using a sharp pencil and paint or burn over your lines.

Another way to put on patterns

Copy the pattern onto a full-sized (8 1/2" x 11" [216 x 279mm]) label. Then you can just peel off the backing and stick it to your work piece.

MATERIALS:

- Hardwood 3/4" to 1" (19mm to 22mm) thick (I prefer oak)
- 6 1/2" x 10" (165 x 254mm) for lion
- 2" x 8" (51 x 203mm) for base
- 1/8" (3mm)-diameter dowel rod, 3/4" (19mm) long
- Minwax Golden Oak Stain
- Black acrylic paint—Delta Ceramcoat 2 oz. (optional)
- Spray adhesive "repositionable" or "temporary bond"

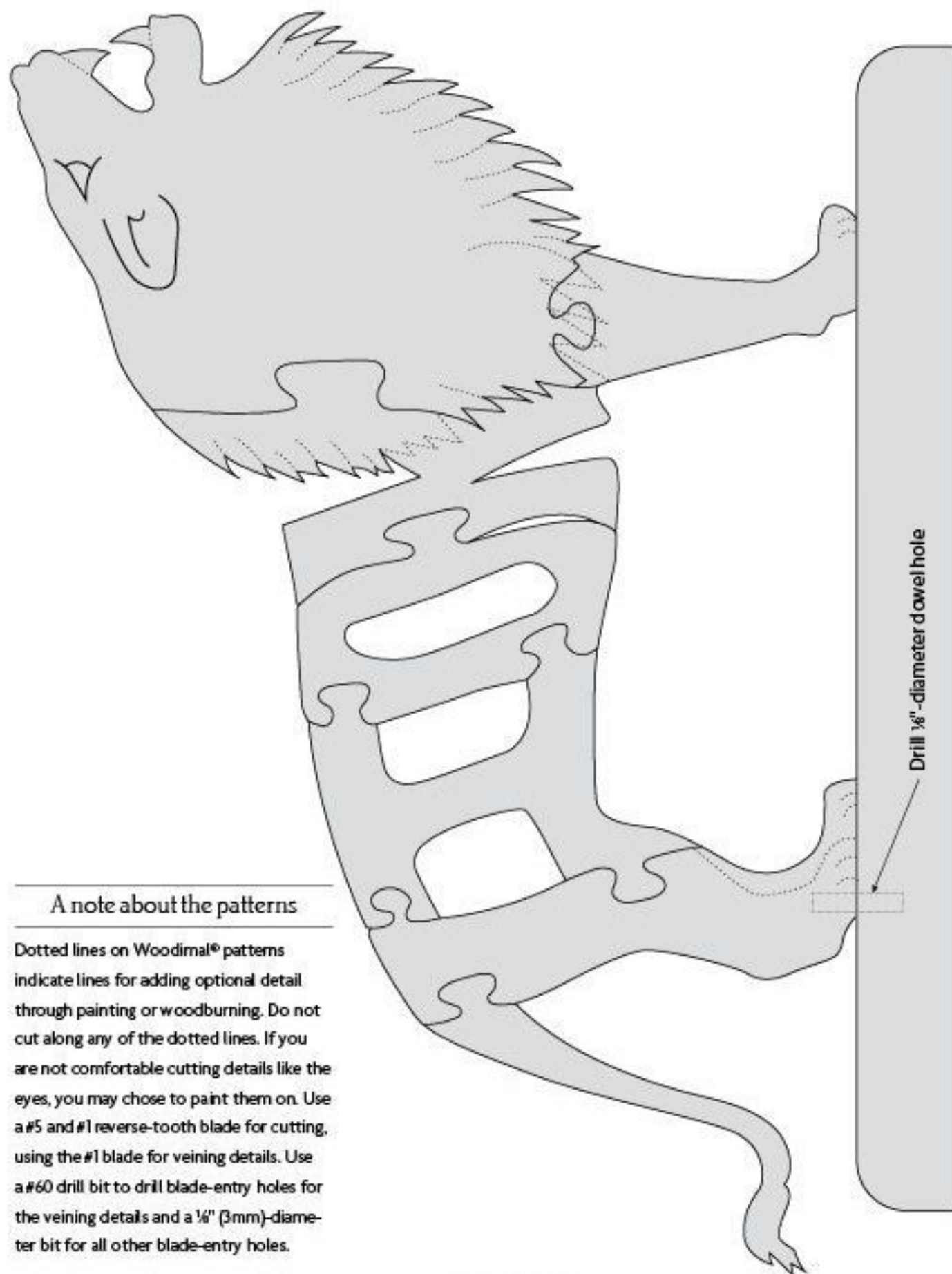
TOOLS:

- #5 scroll saw blade (your choice)
- #60 drill bit
- 1/8" (3mm)-diameter drill bit
- Drill motor or drill press
- Router
- 1/4" (6mm) round off or ogee router bits
- #0 or #1 liner brush (optional)
- Stylus and carbon paper for transferring details from pattern
- Woodburner (optional)
- Sandpaper, 180-grit

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Standing the puzzle up

Lay the pieces flat on a piece of plywood to assemble them. Then sit the Woodimal® upright.



A note about the patterns

Dotted lines on Woodimal® patterns indicate lines for adding optional detail through painting or woodburning. Do not cut along any of the dotted lines. If you are not comfortable cutting details like the eyes, you may choose to paint them on. Use a #5 and #1 reverse-tooth blade for cutting, using the #1 blade for veining details. Use a #60 drill bit to drill blade-entry holes for the veining details and a 1/6" (3mm)-diameter bit for all other blade-entry holes.

ELEPHANT

The Elephant Woodimal® is a fun design that is large enough for the youngest puzzle assembler. What child (or adult) can resist a creative puzzle such as this? And the children won't even know they are learning something!

On the pattern, the dotted lines are for painting reference only—DO NOT cut along those lines. If you are not comfortable scrolling the eyes, paint them on or burn them with a woodburner. Use a #5 reverse-tooth blade for most of the cutting, but use a #1 reverse-tooth blade for the veining details. I use a 1/8" (3mm)-diameter drill bit for the blade-entry holes for the letters and a #60 drill bit for the veining details.

After scrolling, mount the Elephant on a base. I round off the corners of the base with a 1/4" (6mm)-radius round-over router bit or a 1/4" (6mm)-radius ogee router bit. You can also round it over with sandpaper.

MATERIALS:

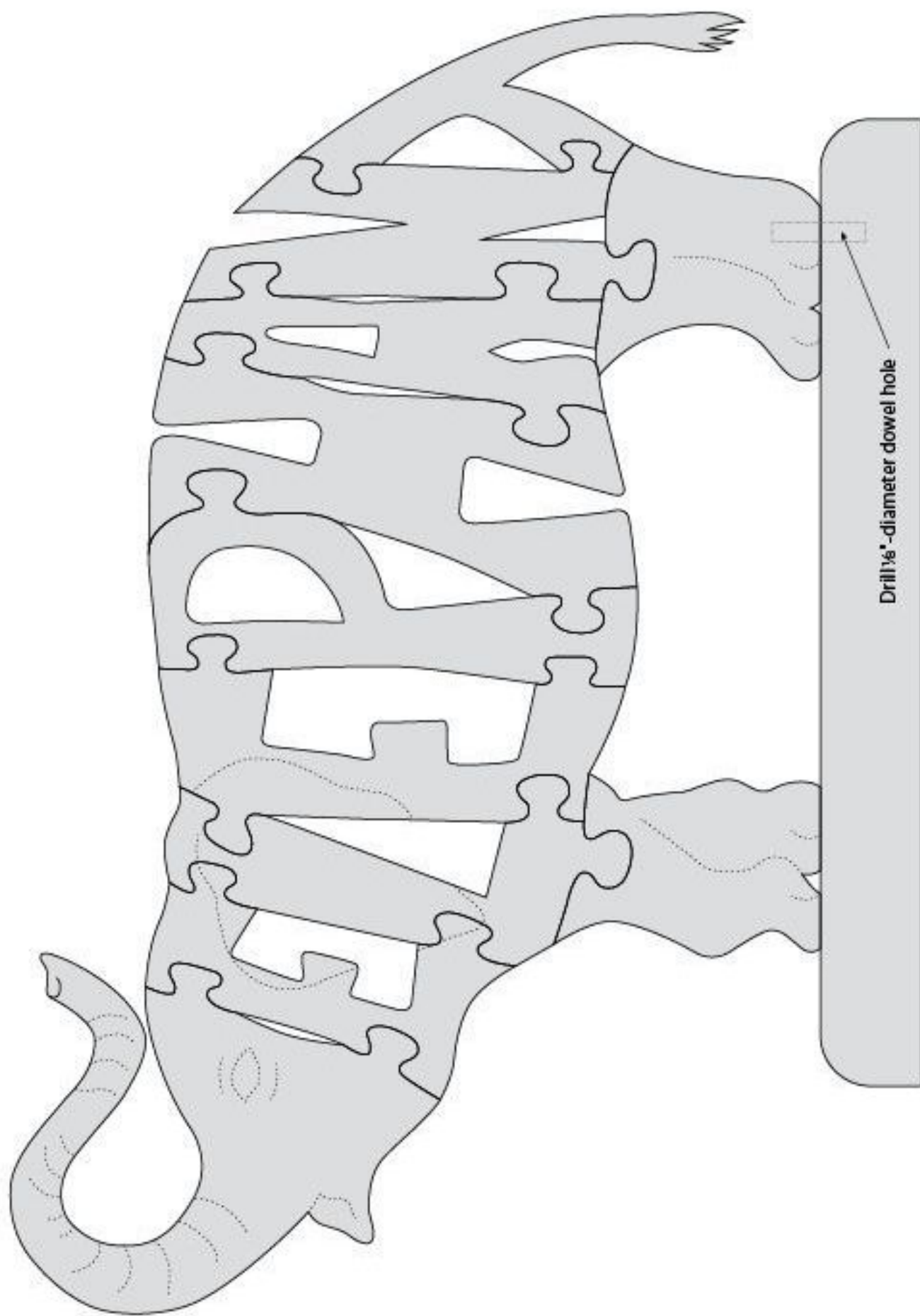
- 3/4" or 7/8" x 6" x 10" (19 or 22 x 152 x 254mm) hardwood of choice (puzzle)
- 3/4" x 2" x 8" (19 x 51 x 203mm) matching hardwood of choice (base)
- Spray adhesive, transfer paper, carbon paper (to transfer pattern to work piece)
- Finish or paint of choice
- Assorted grits of sandpaper

TOOLS:

- #5 & #1 reverse-tooth tooth blades or blades of choice
- Drill with 1/8" (3mm)-diameter and #60 drill bits
- Router with 1/4" (6mm)-radius round-over or ogee bit (optional)

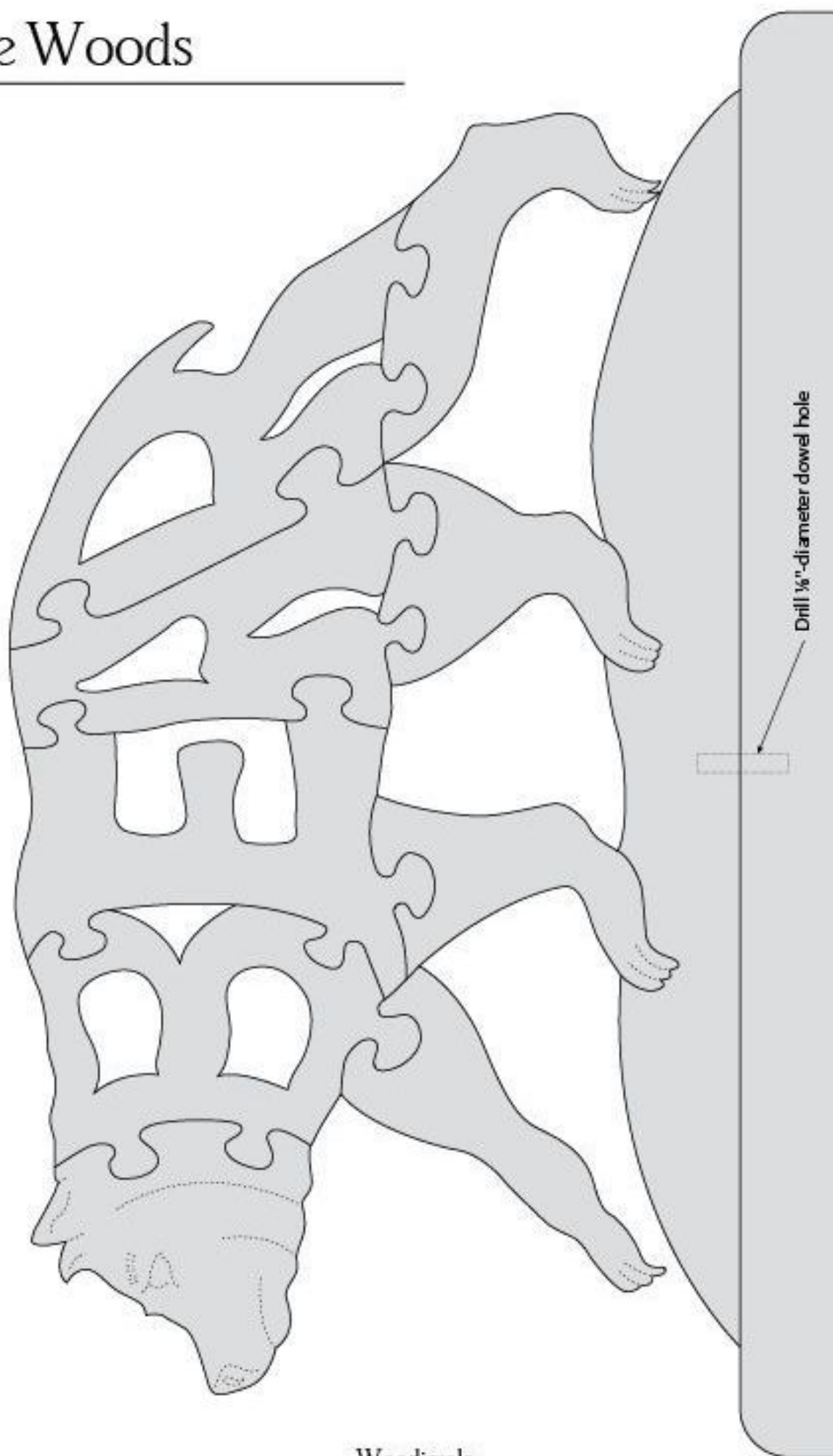
The author used these products for the project. Substitute your choice of brand, tools, and materials as desired.



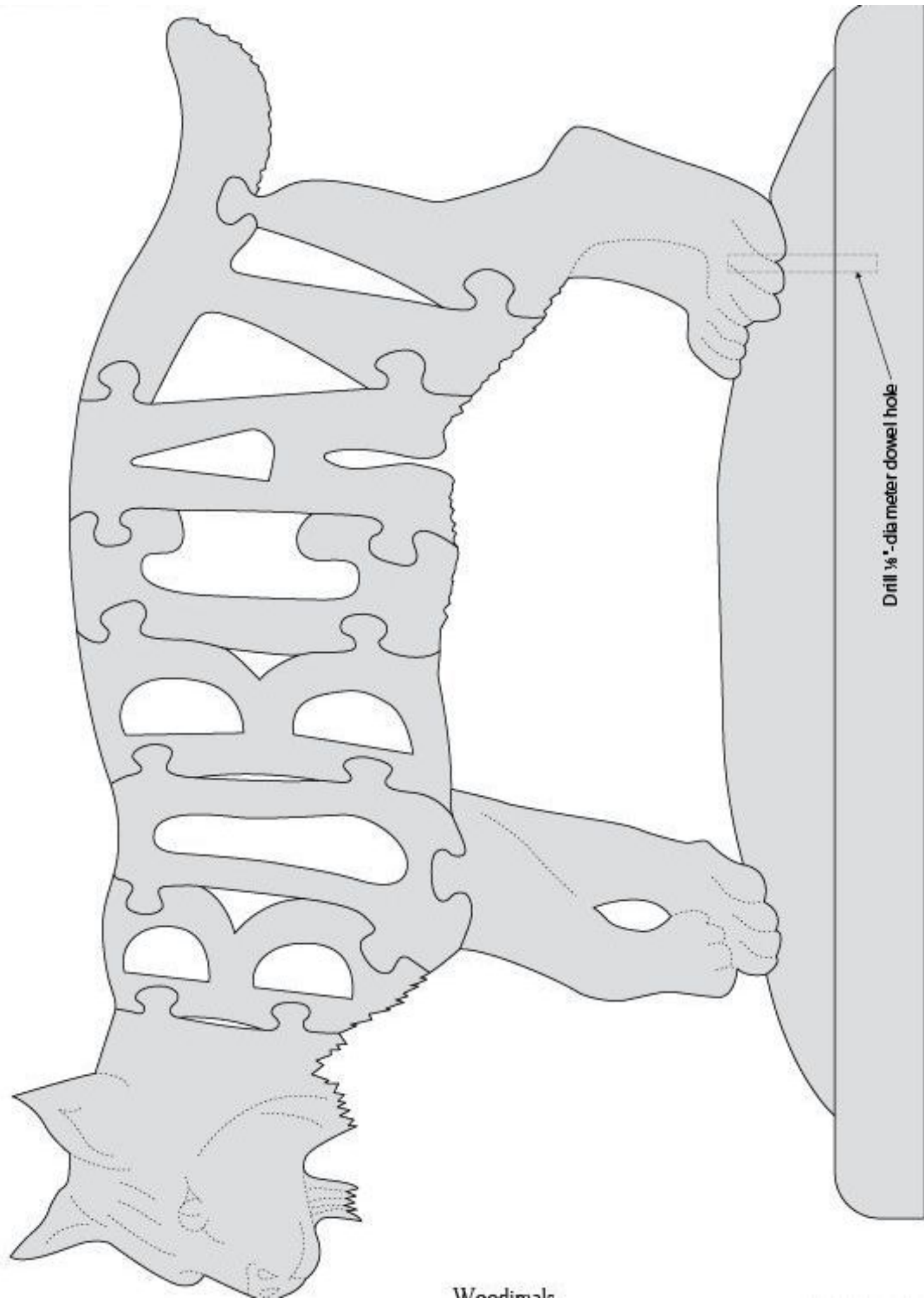


Elephant Woodimal®
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In the Woods

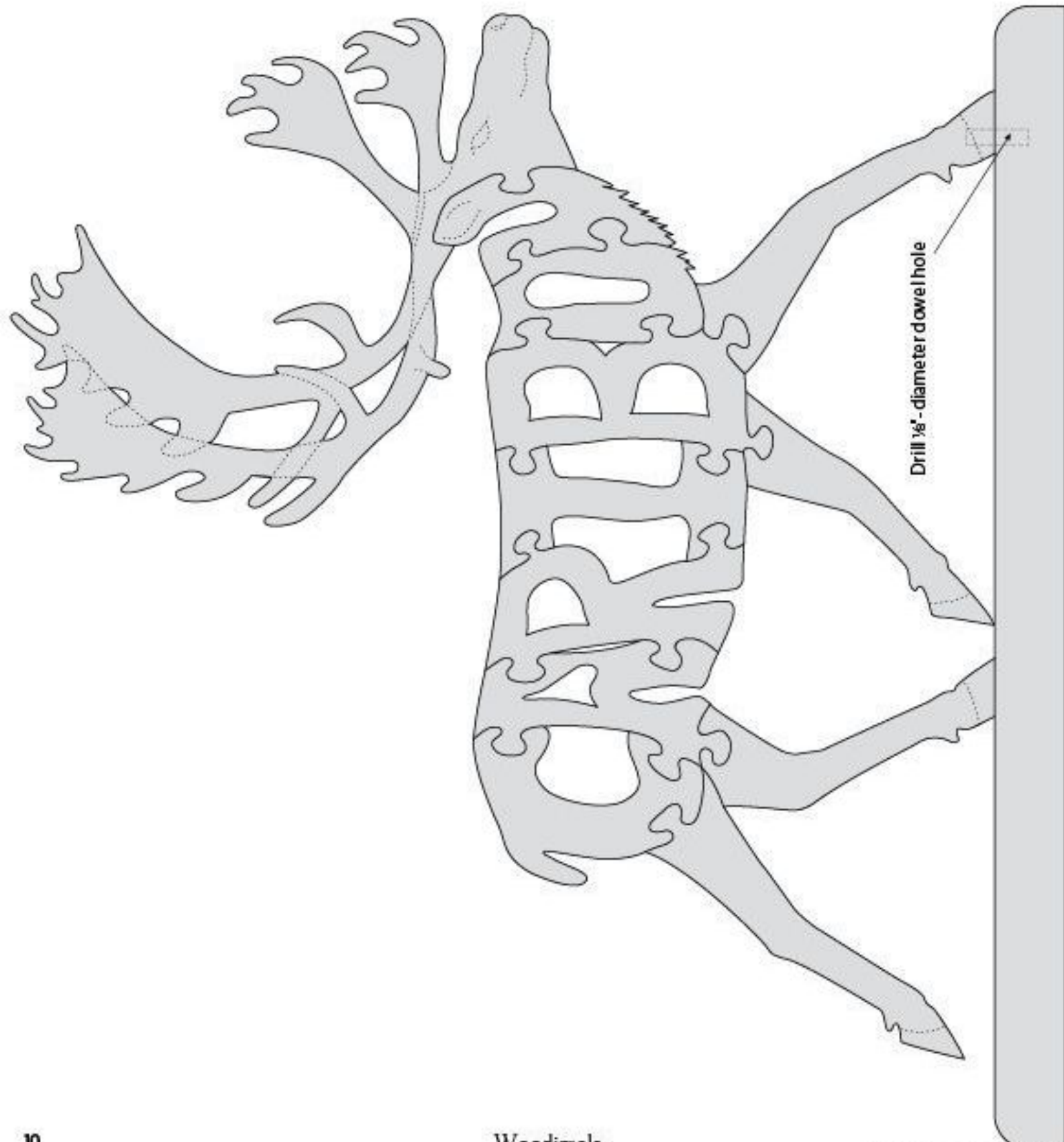


Bear Woodimal®
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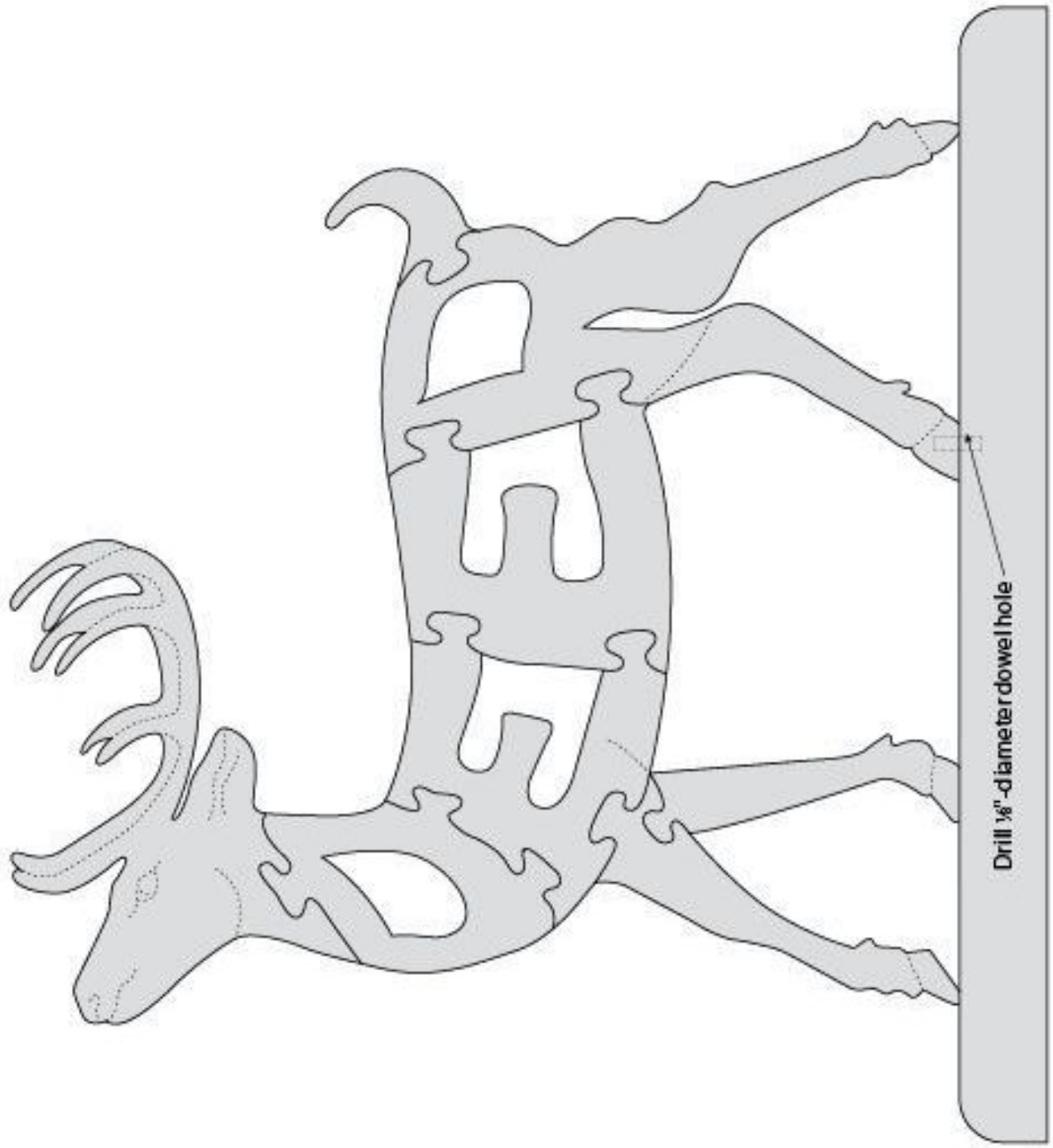


Drill $\frac{1}{8}$ "-dia meter dowel hole

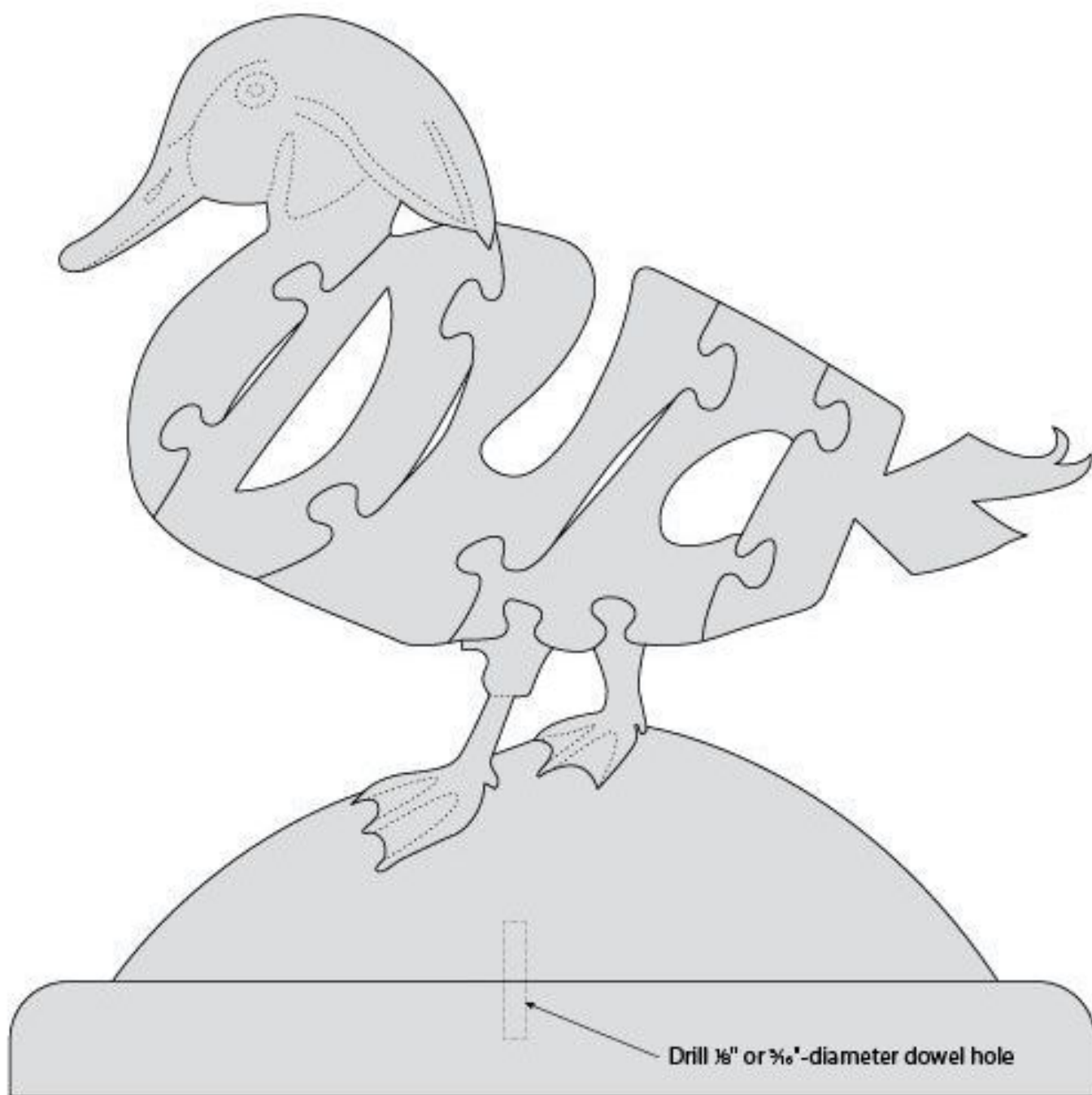
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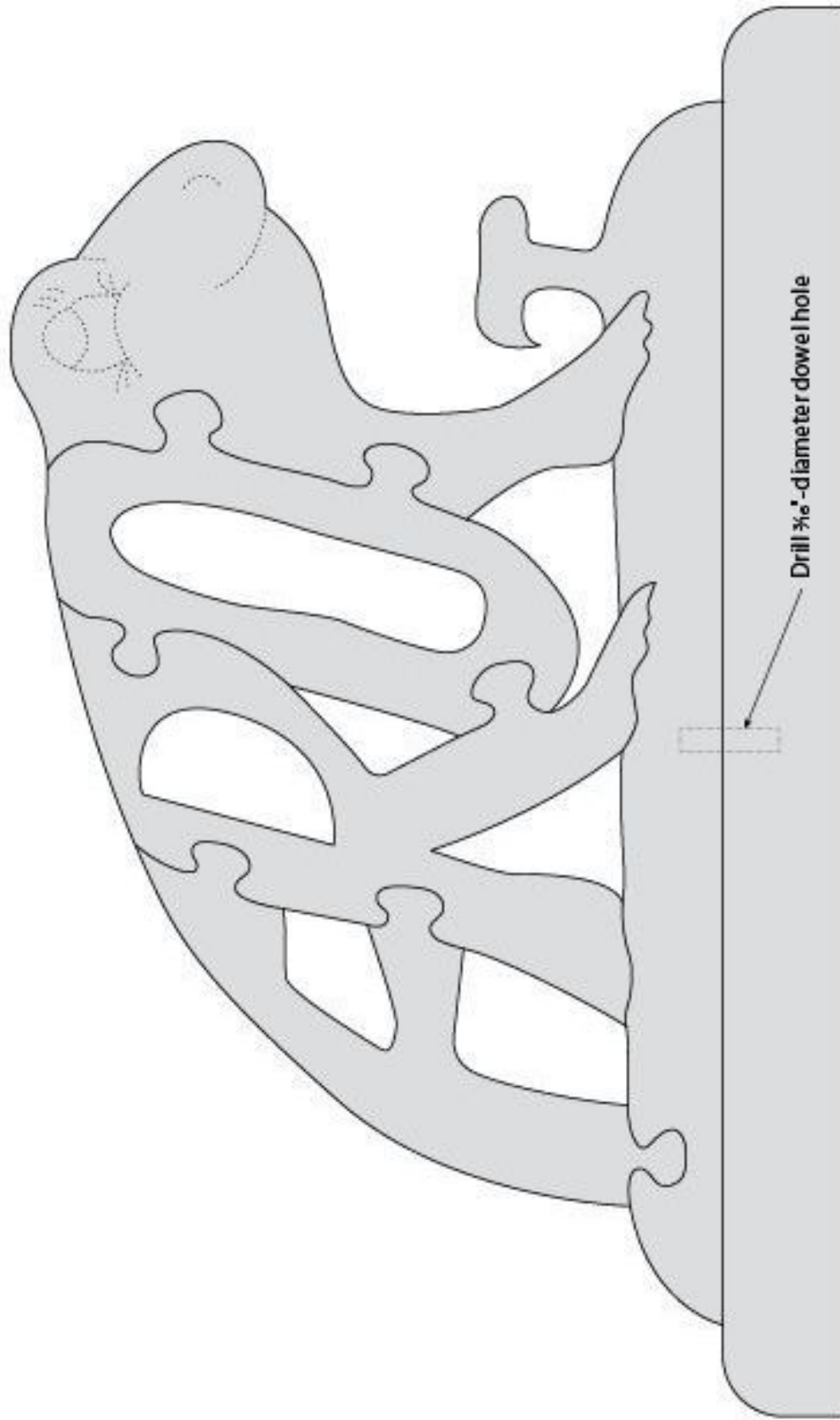
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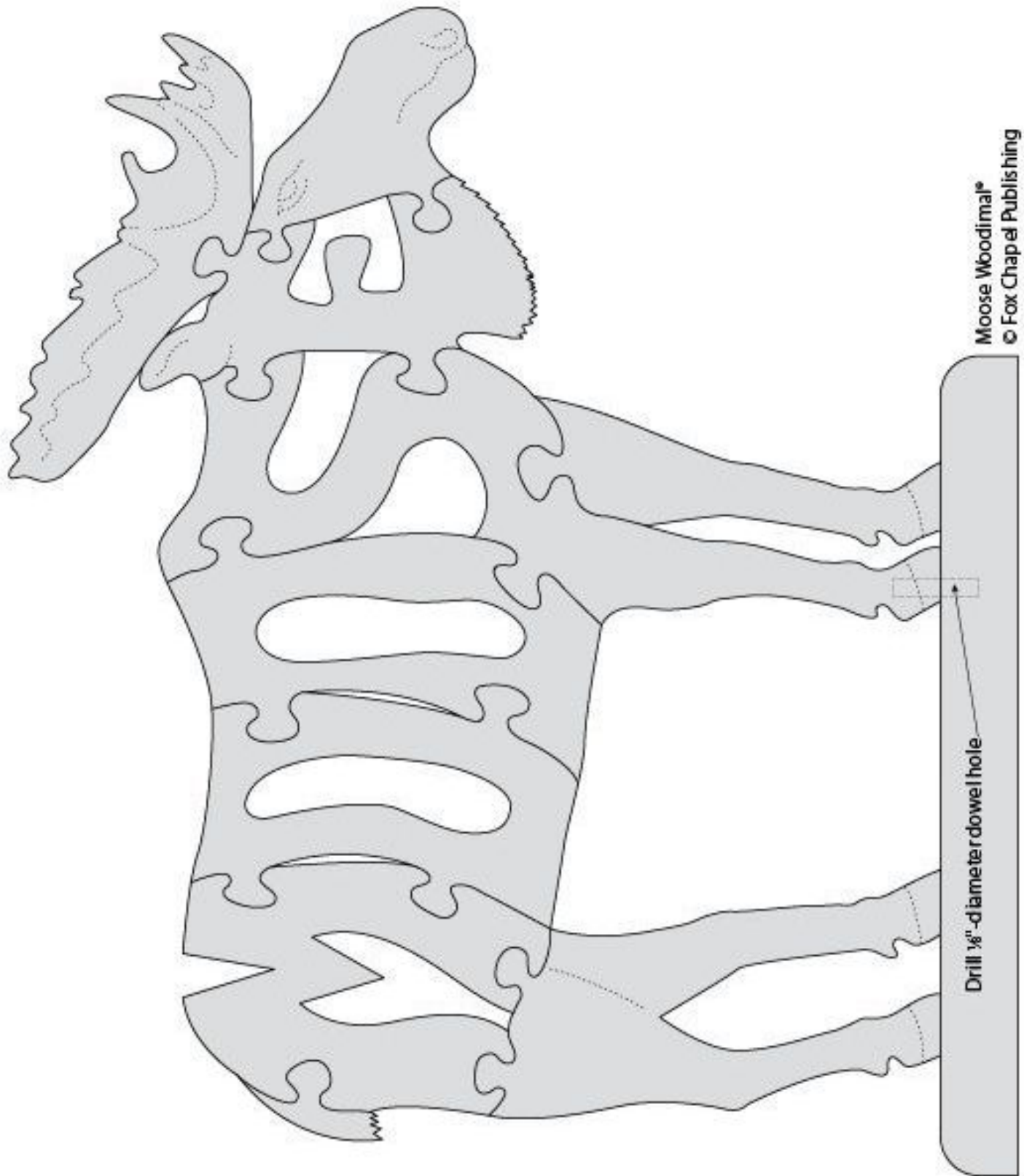
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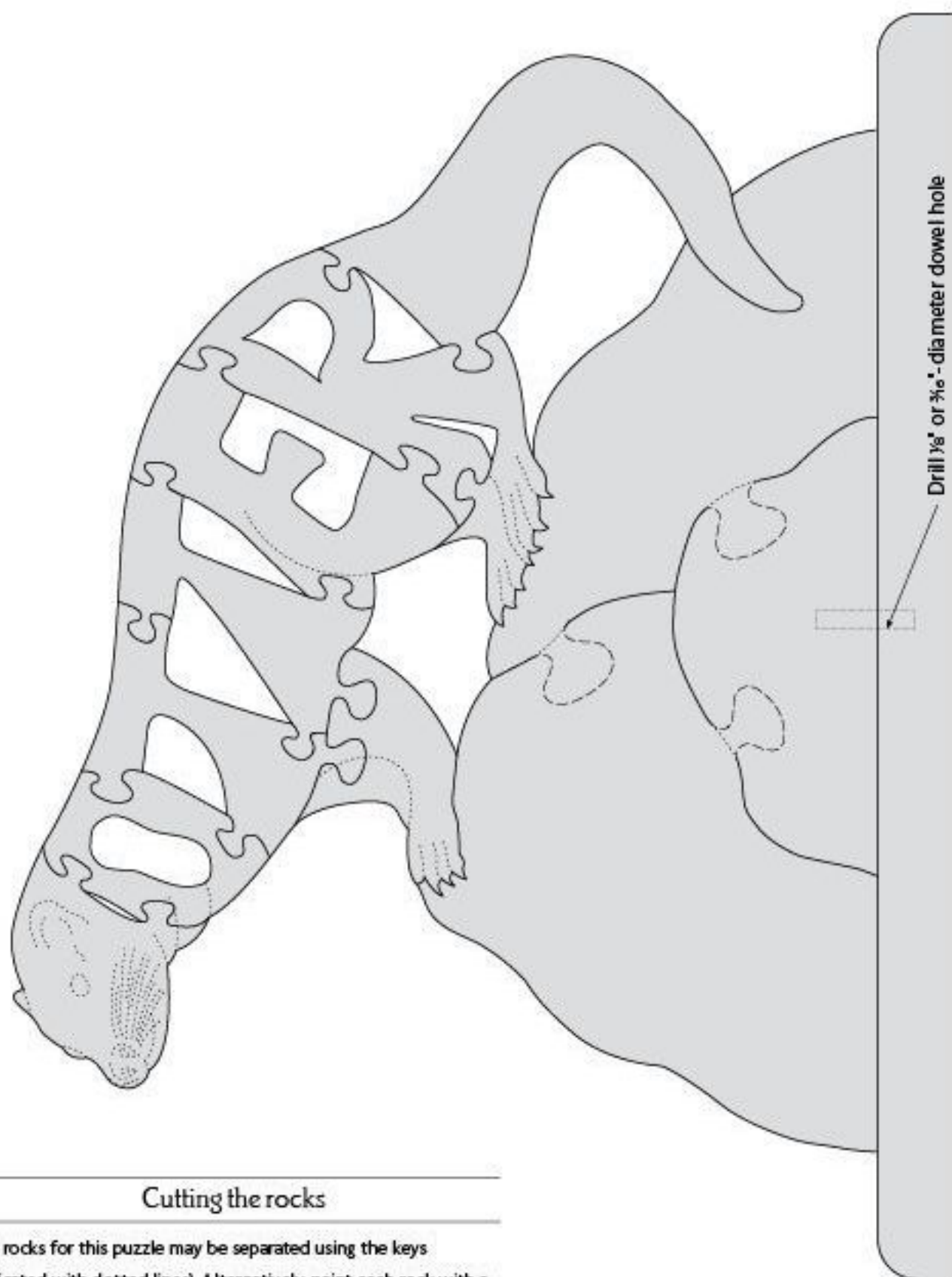


Duck Woodimal®
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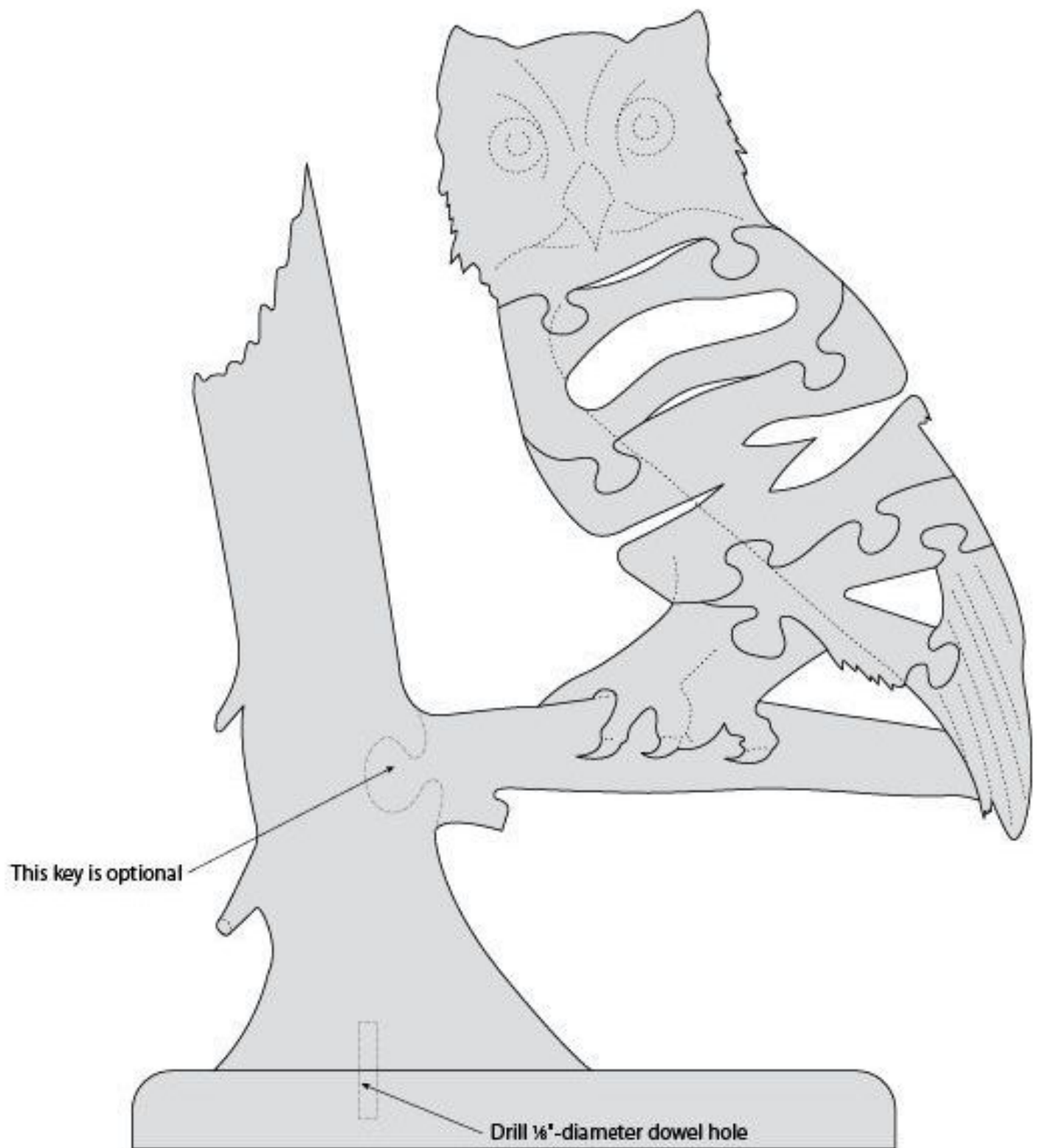
Frog Woodimal®
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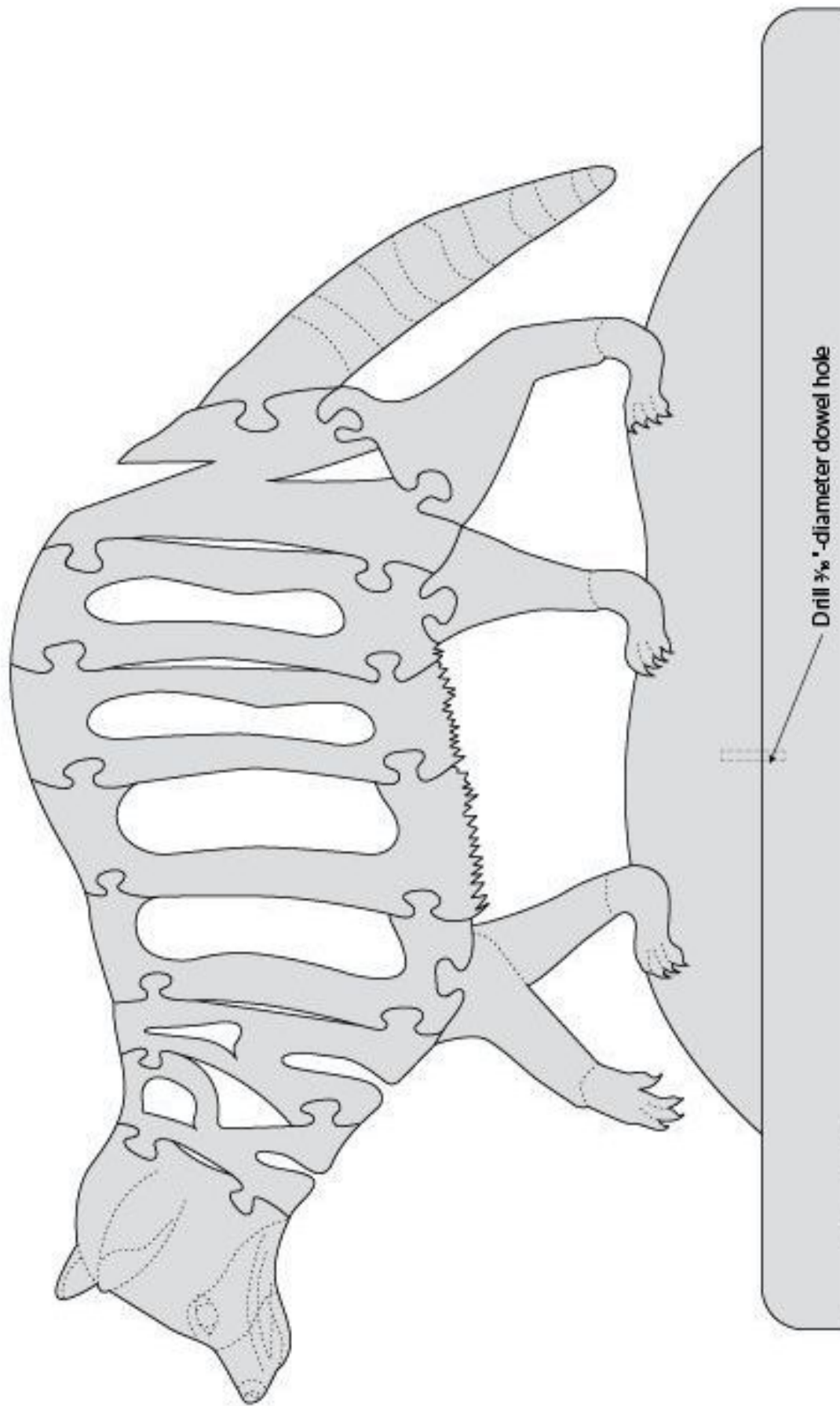


Cutting the rocks

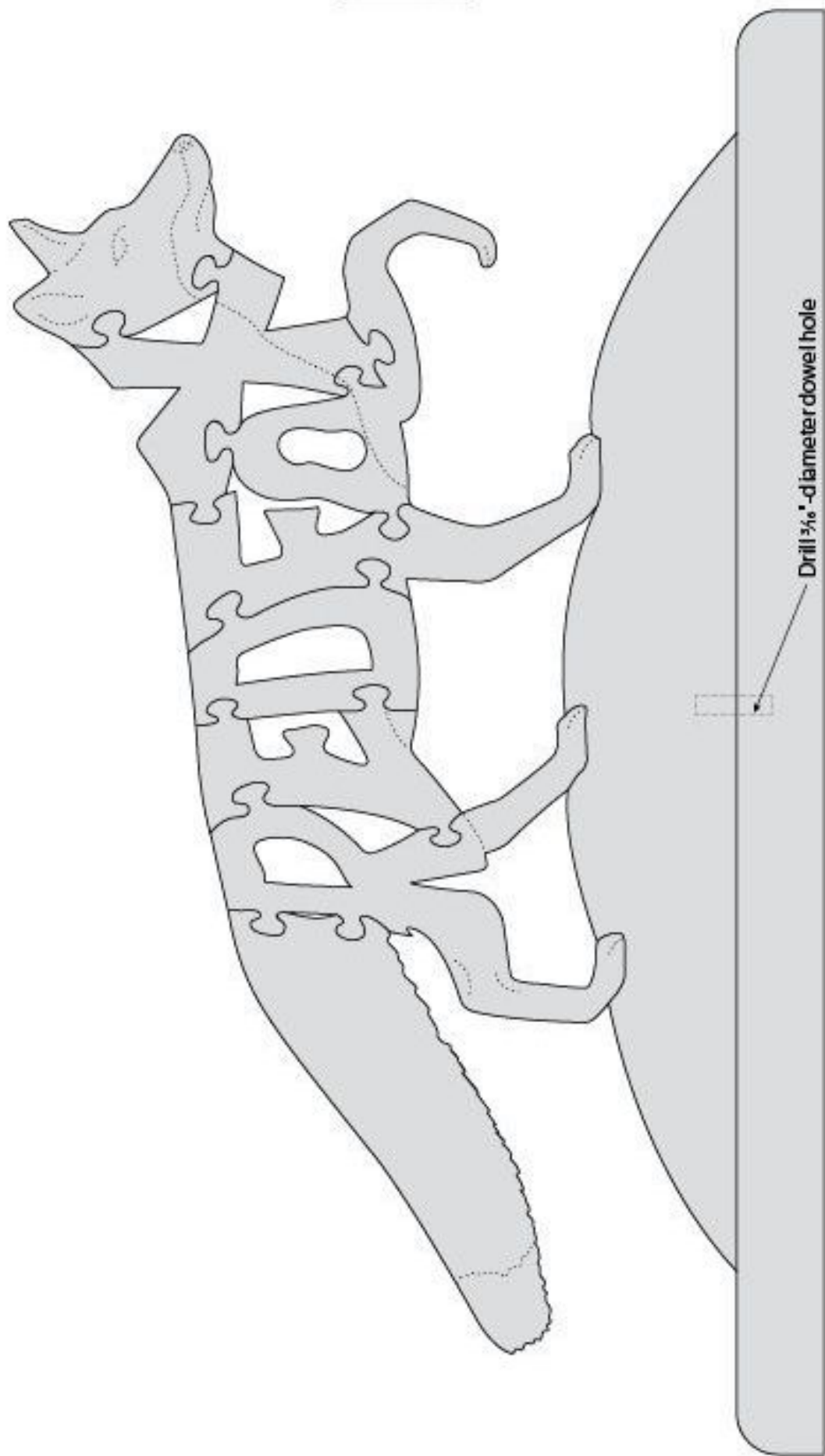
The rocks for this puzzle may be separated using the keys (indicated with dotted lines). Alternatively, paint each rock with a slightly darker stain or color than the one in front of it to create the illusion of depth.



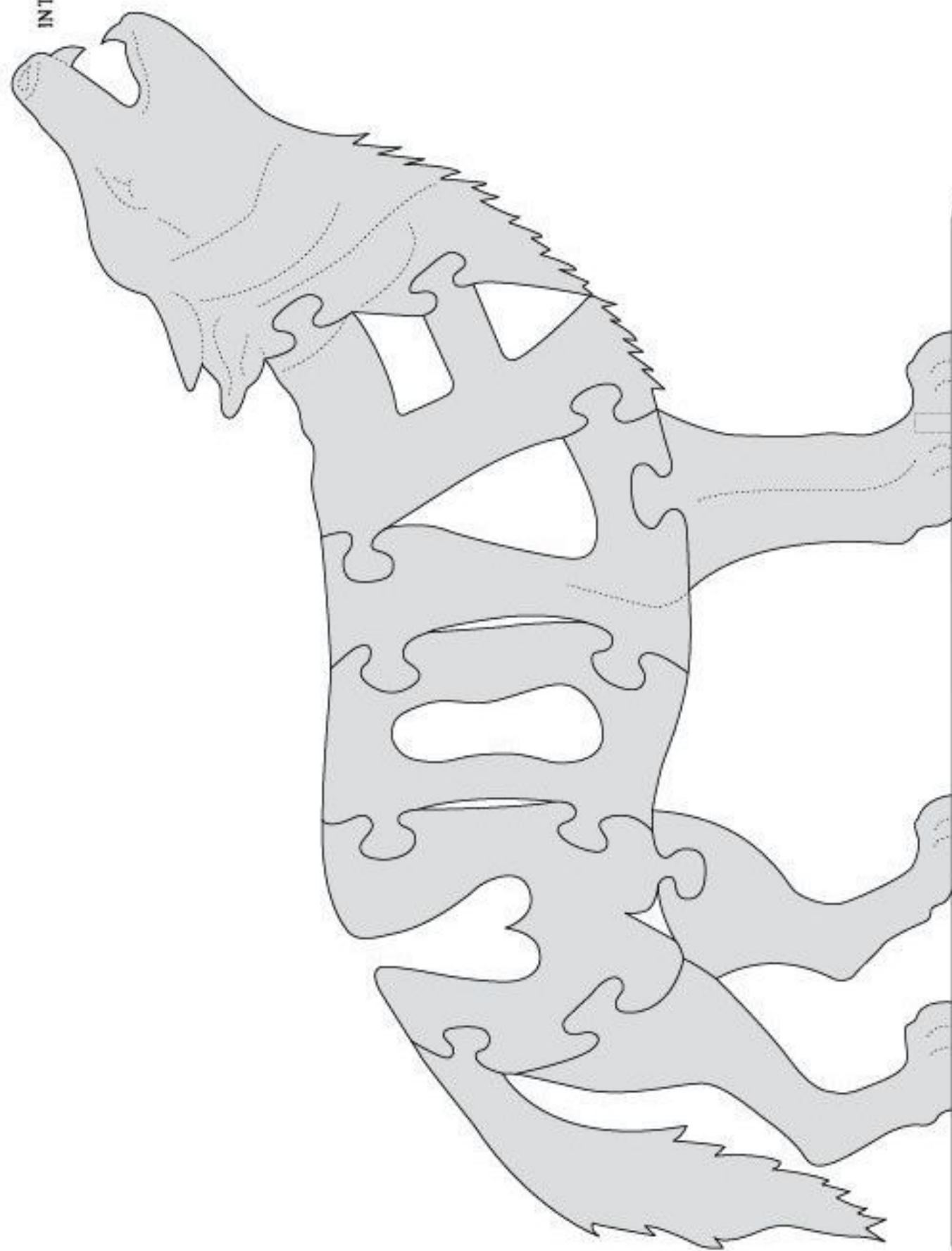
Owl Woodimal®
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Raccoon Woodima®
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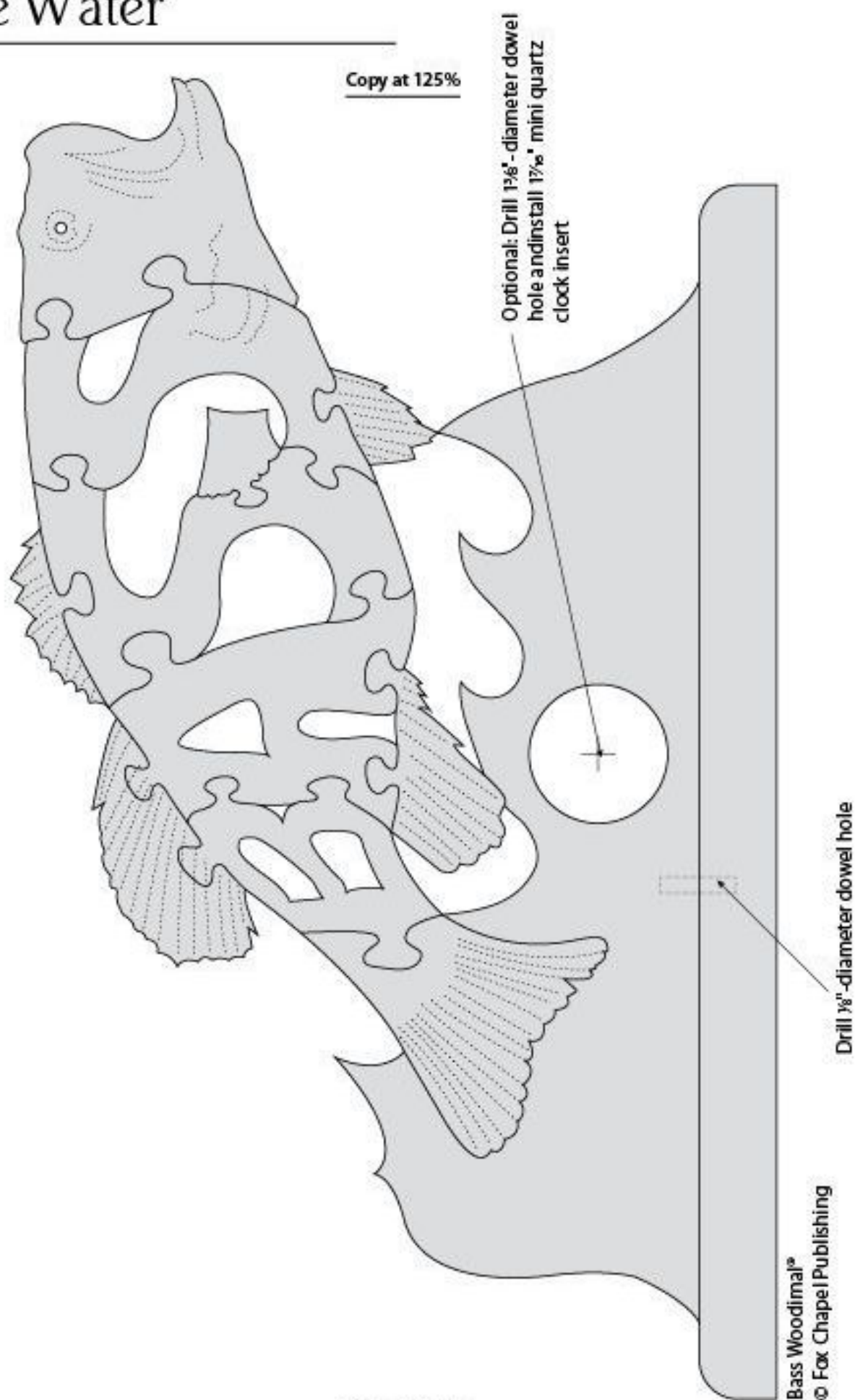
Red Fox Woodimal®
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Drill 1/8"-diameter dowel hole

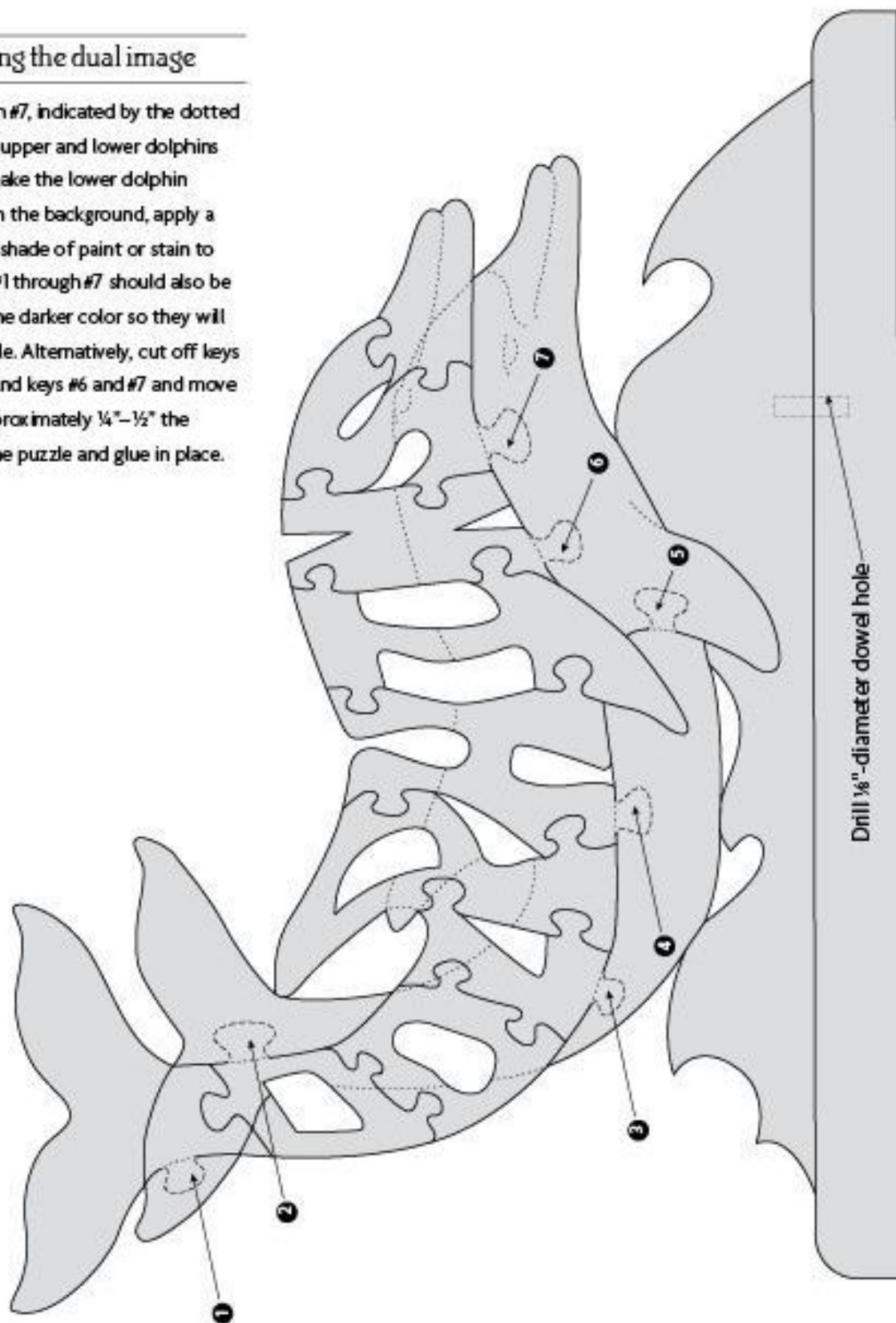
In the Water

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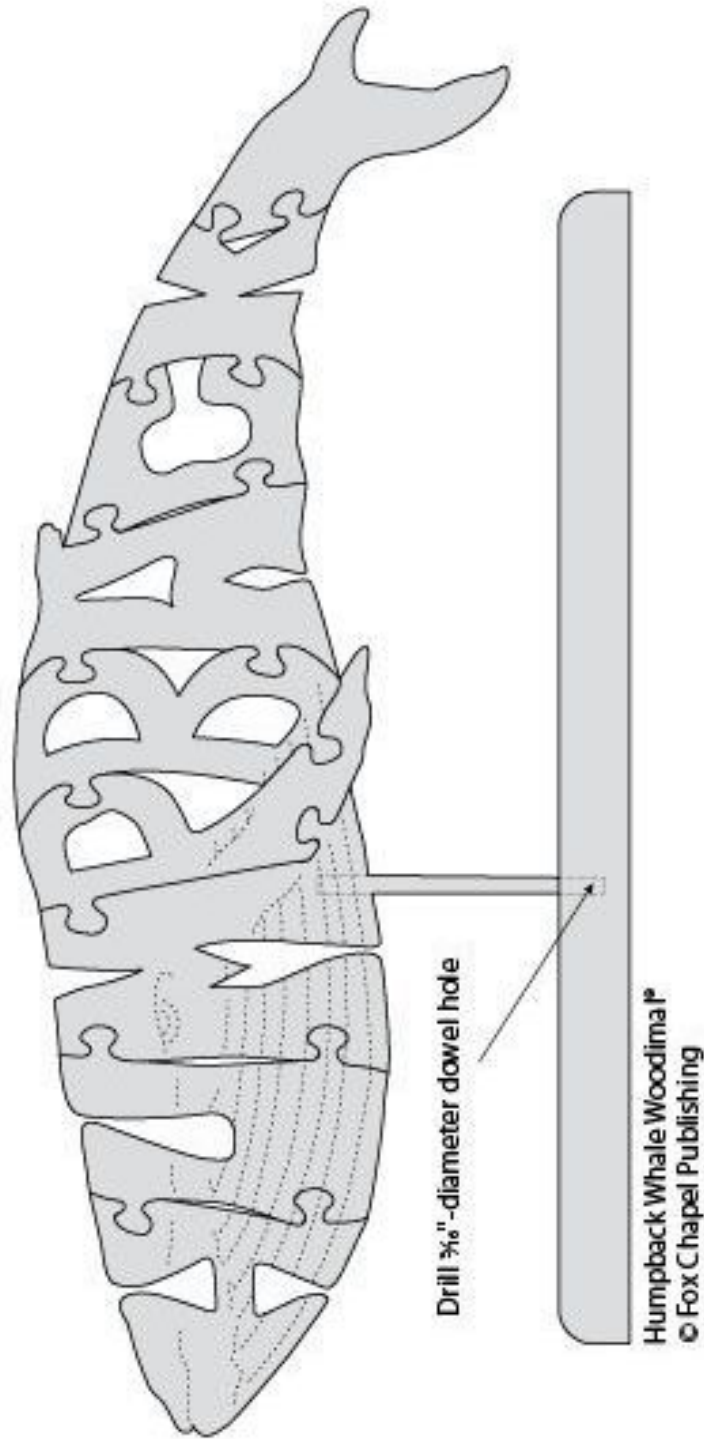


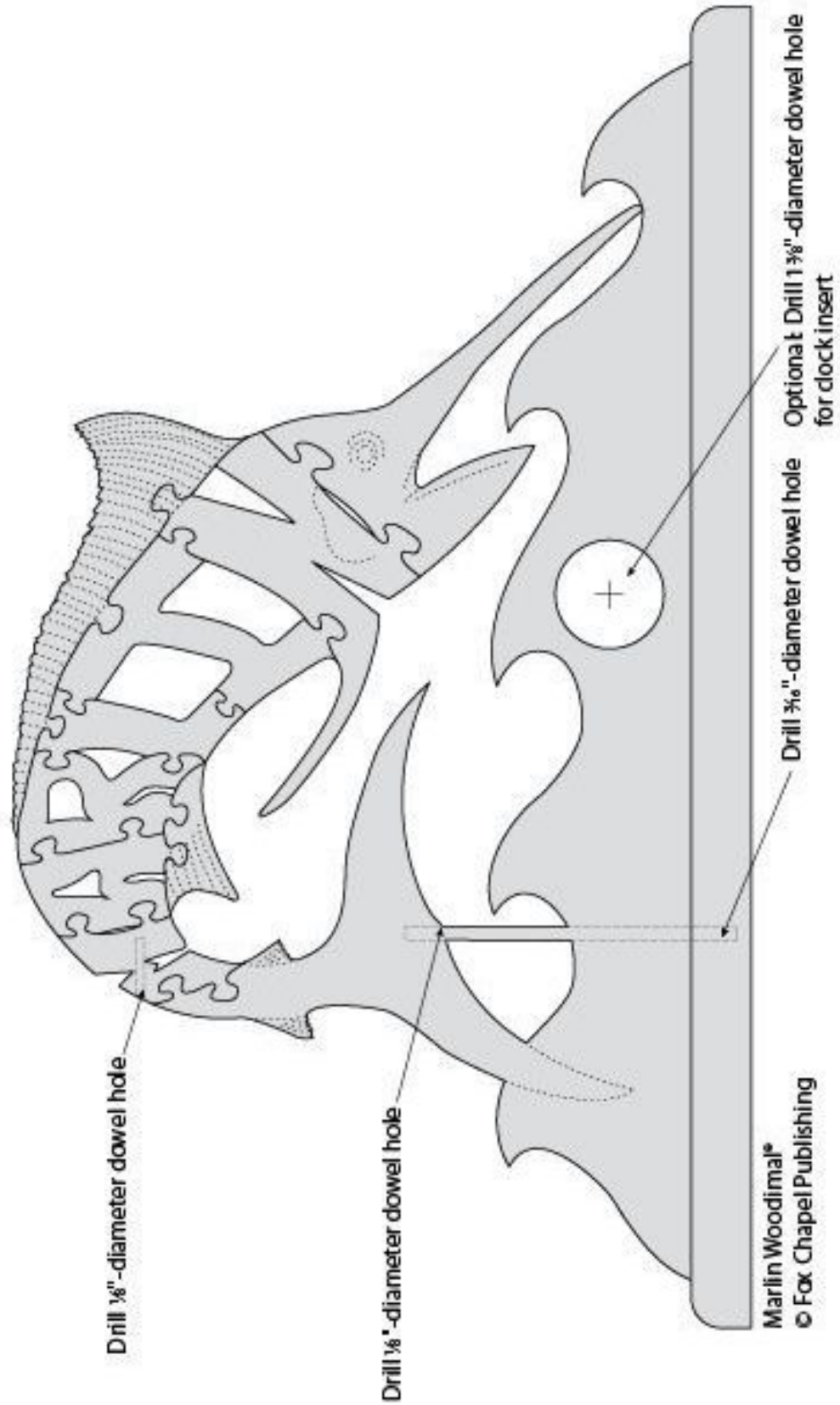
Creating the dual image

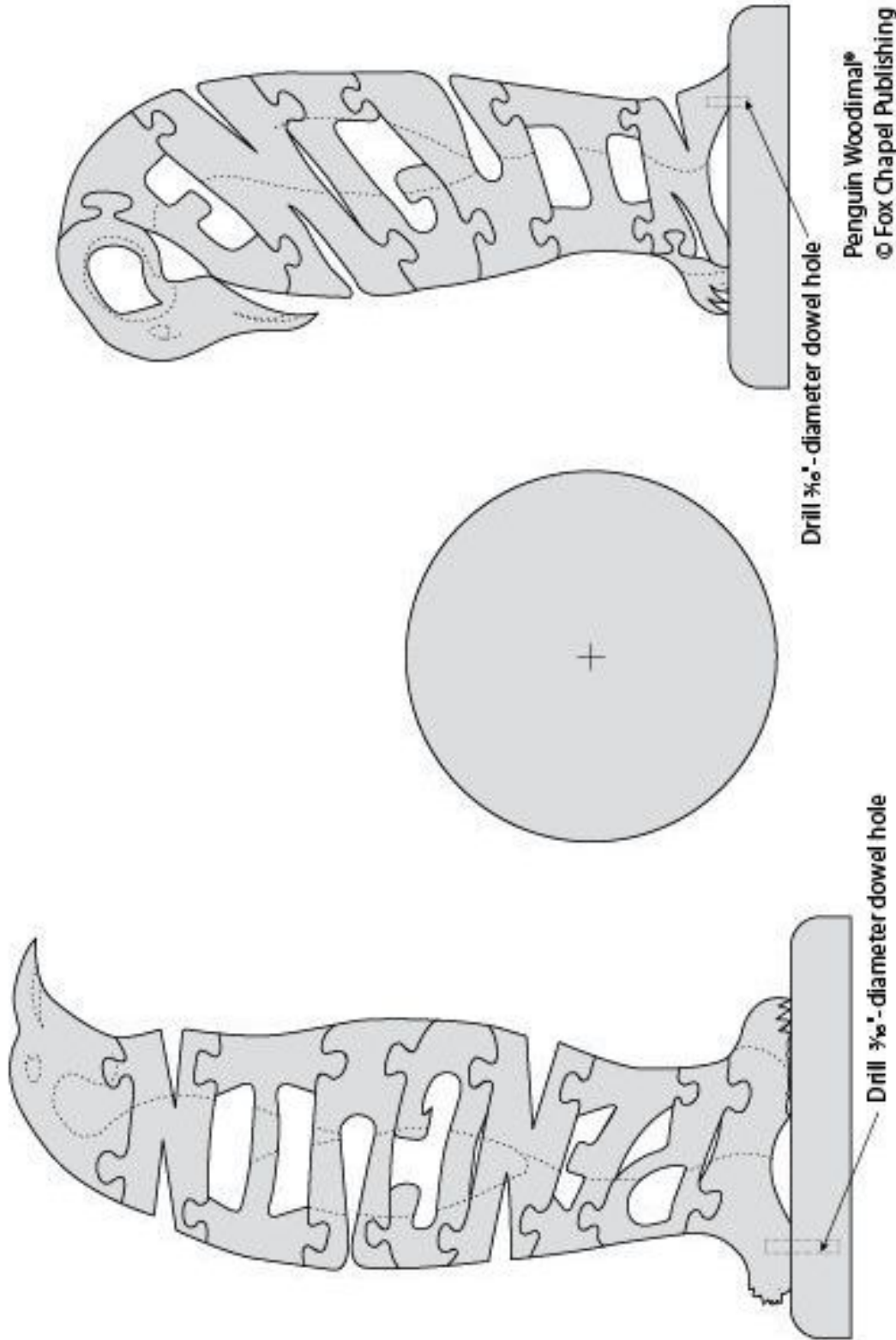
Keys #1 through #7, indicated by the dotted lines, hold the upper and lower dolphins together. To make the lower dolphin appear to be in the background, apply a slightly darker shade of paint or stain to it. Note: Keys #1 through #7 should also be stained with the darker color so they will not be as visible. Alternatively, cut off keys #1 through #4 and keys #6 and #7 and move them back approximately $\frac{1}{4}$ "– $\frac{1}{2}$ " the thickness of the puzzle and glue in place.

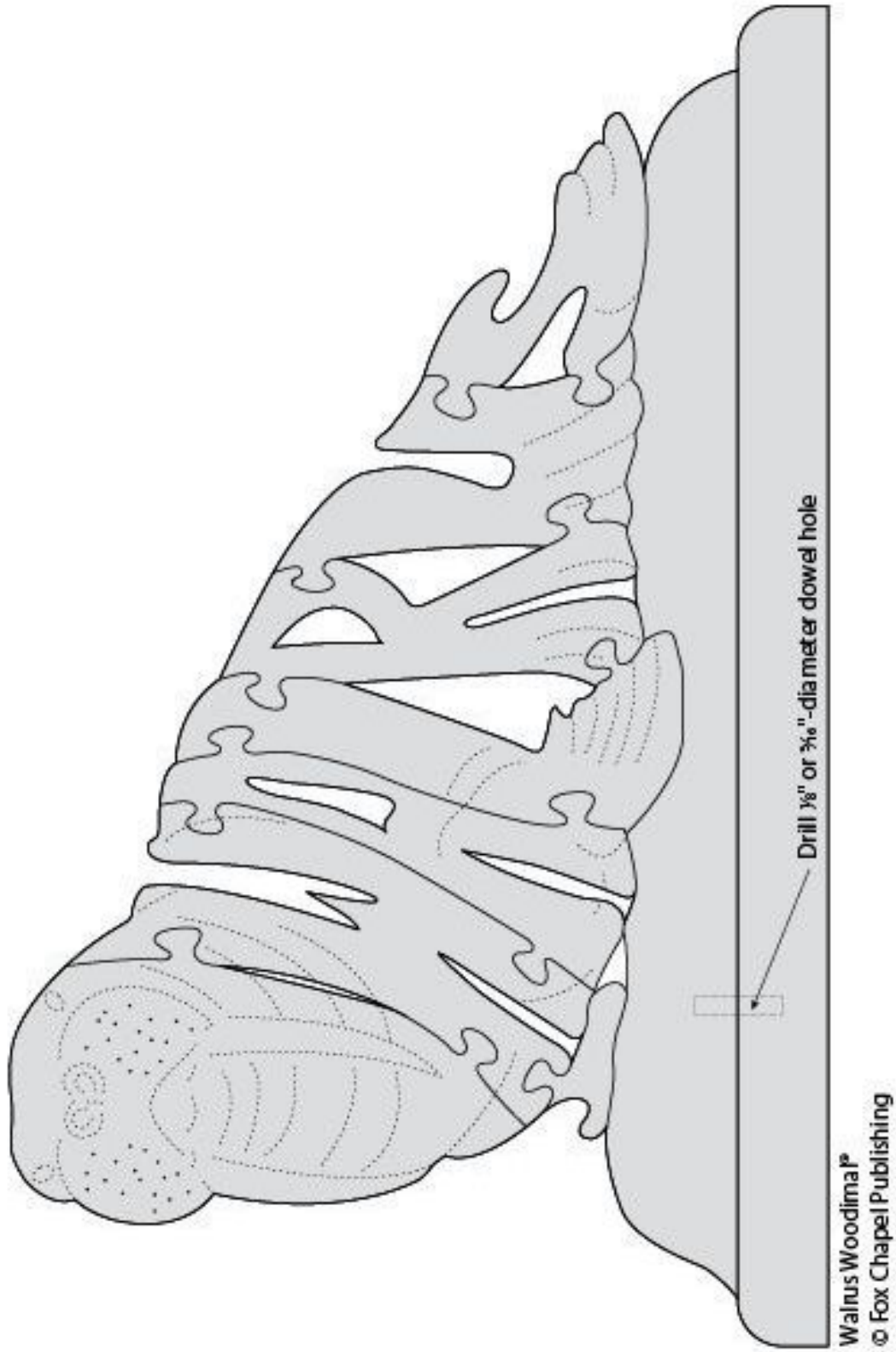


Dolphin Woodima![®]
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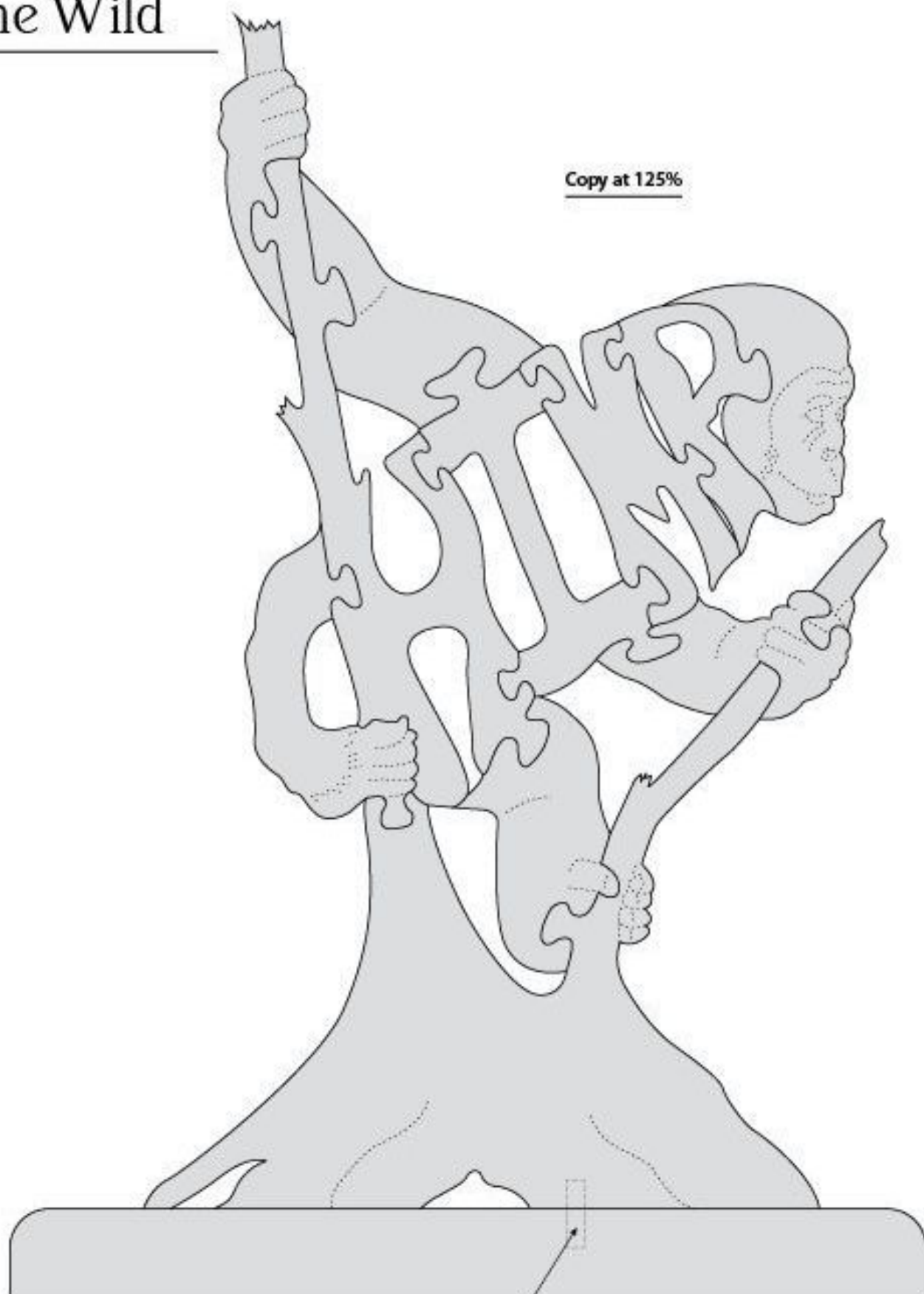






In the Wild

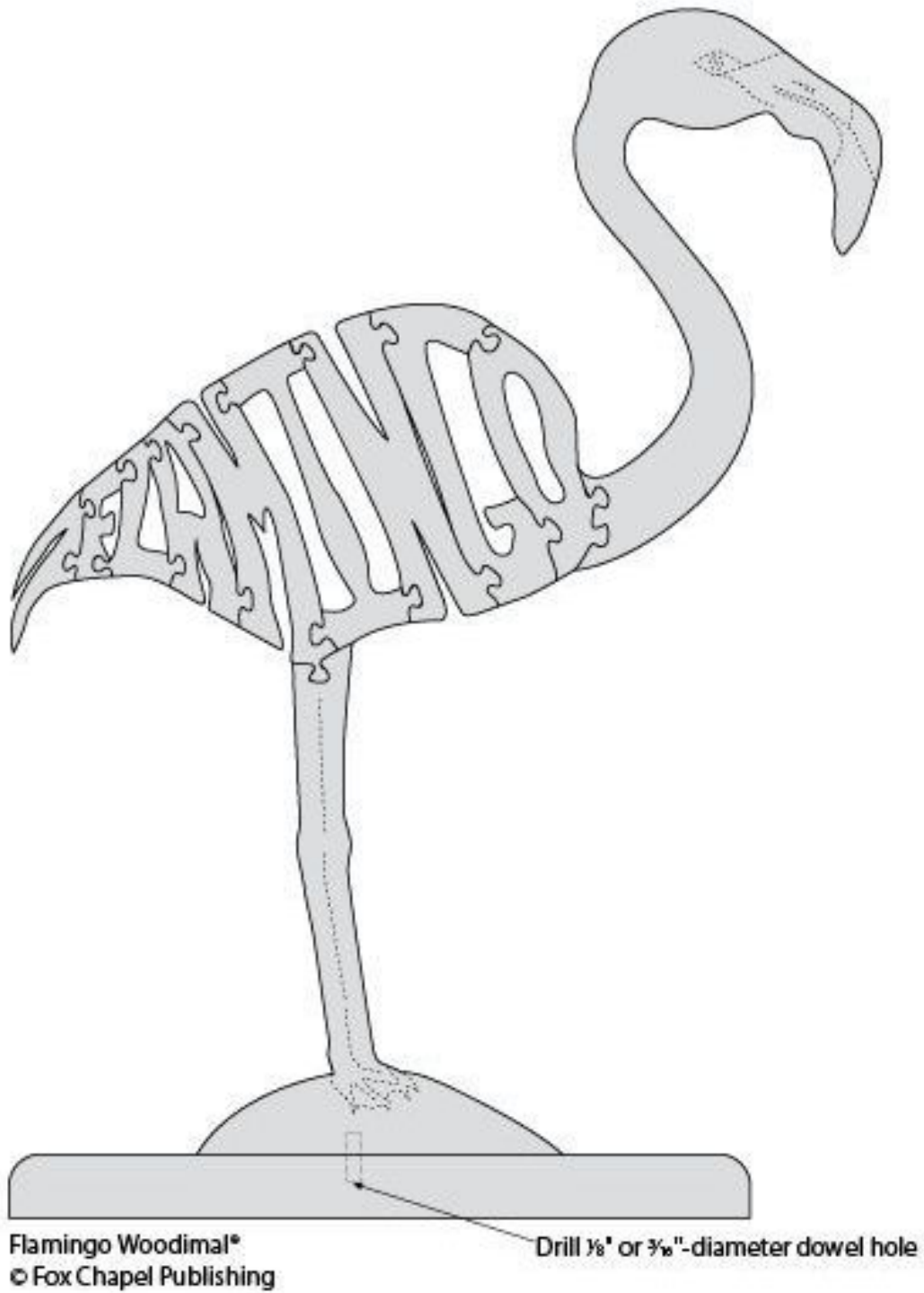
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Chimp Woodimal®
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Drill $\frac{3}{8}$ "-diameter dowel hole

Woodimals

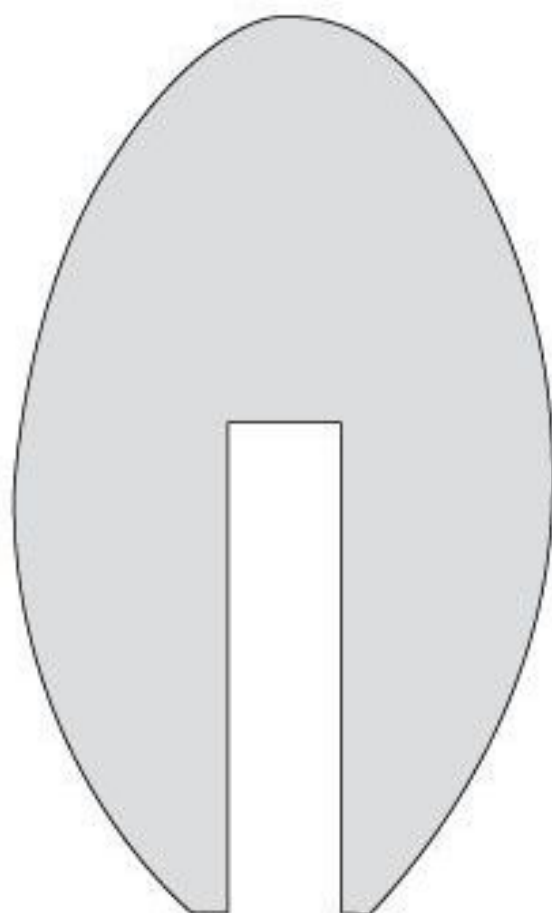


Wood grain

Make sure the wood grain of all your puzzle pieces runs parallel to the wood grain for the flamingo's legs to prevent breakage.

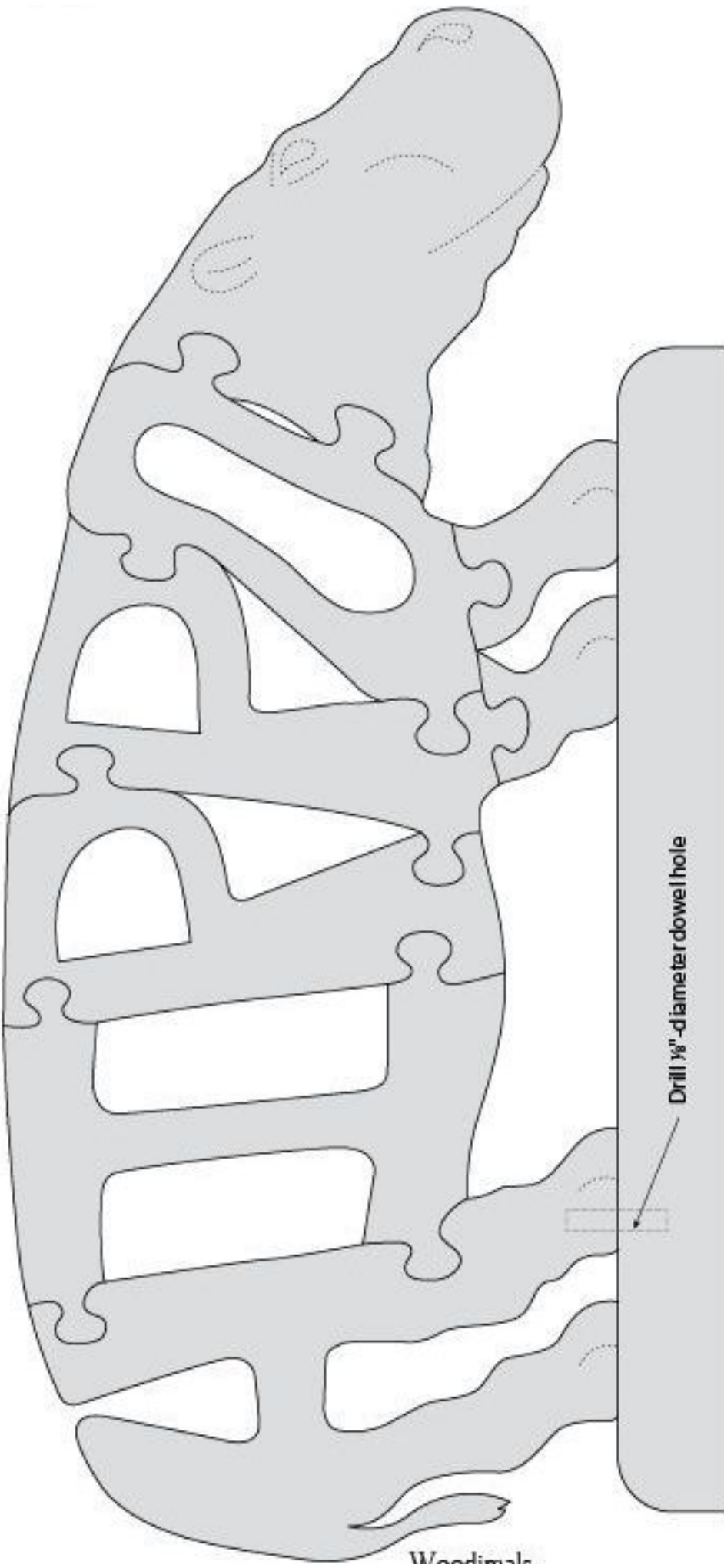


Giraffe Woodimal®
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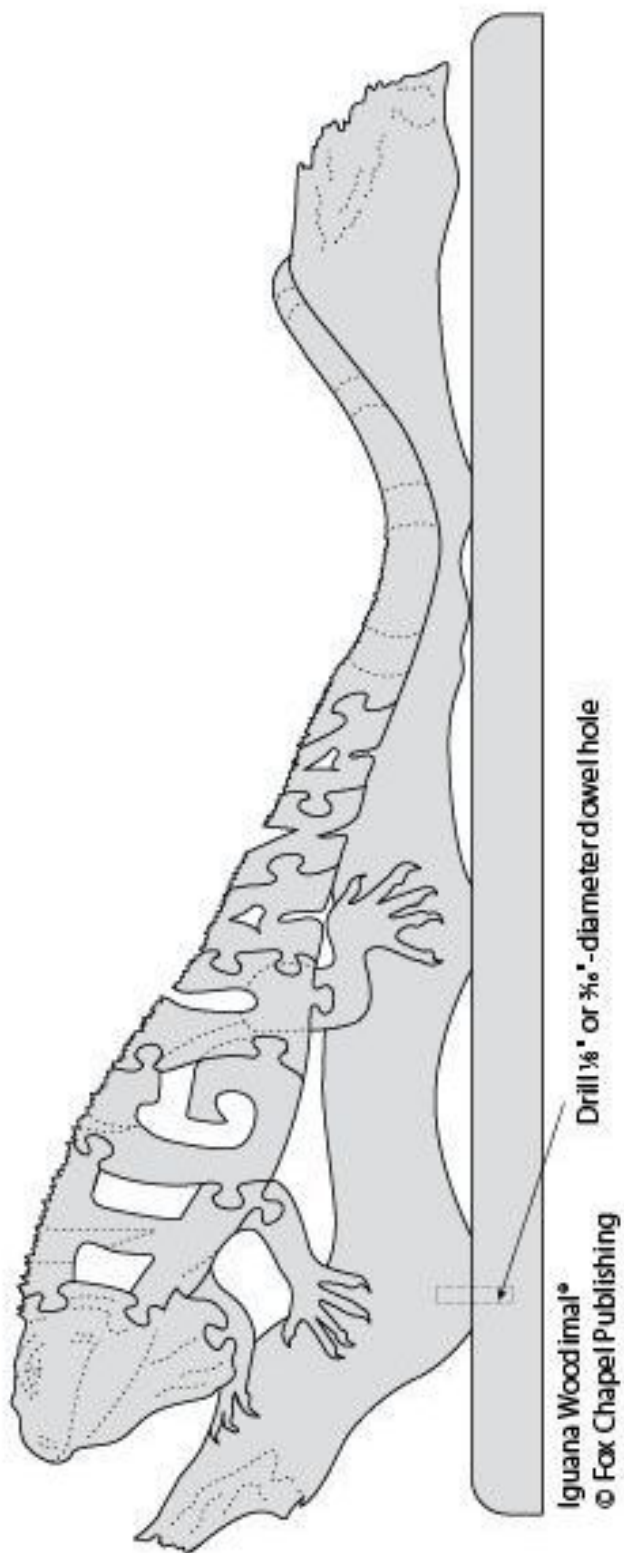


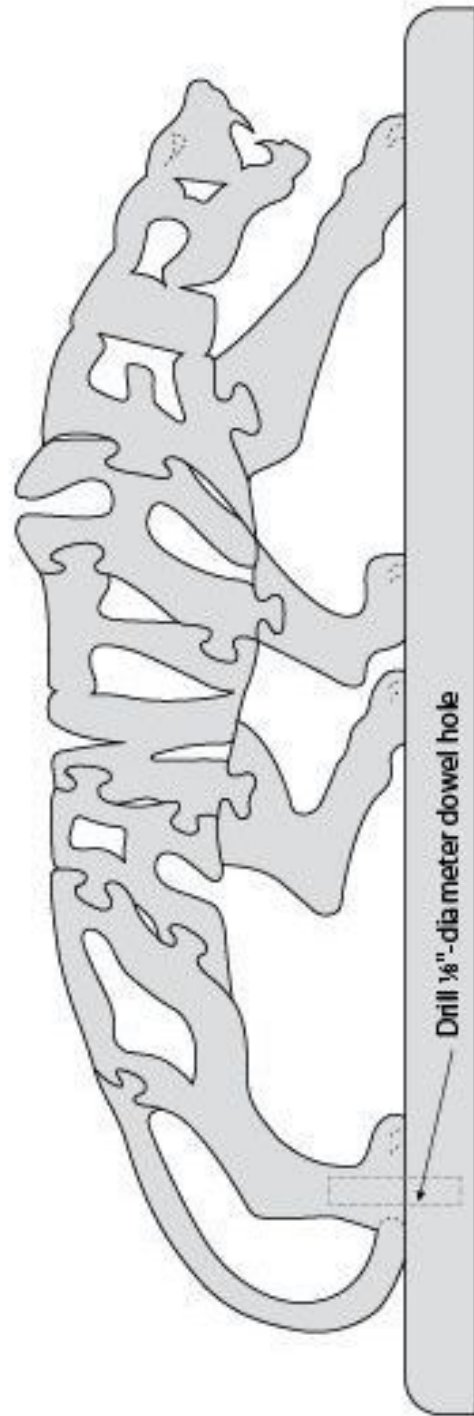
Cutting the base

The thickness of the slot cut in the base is determined by the thickness of the stock you use for the giraffe puzzle.

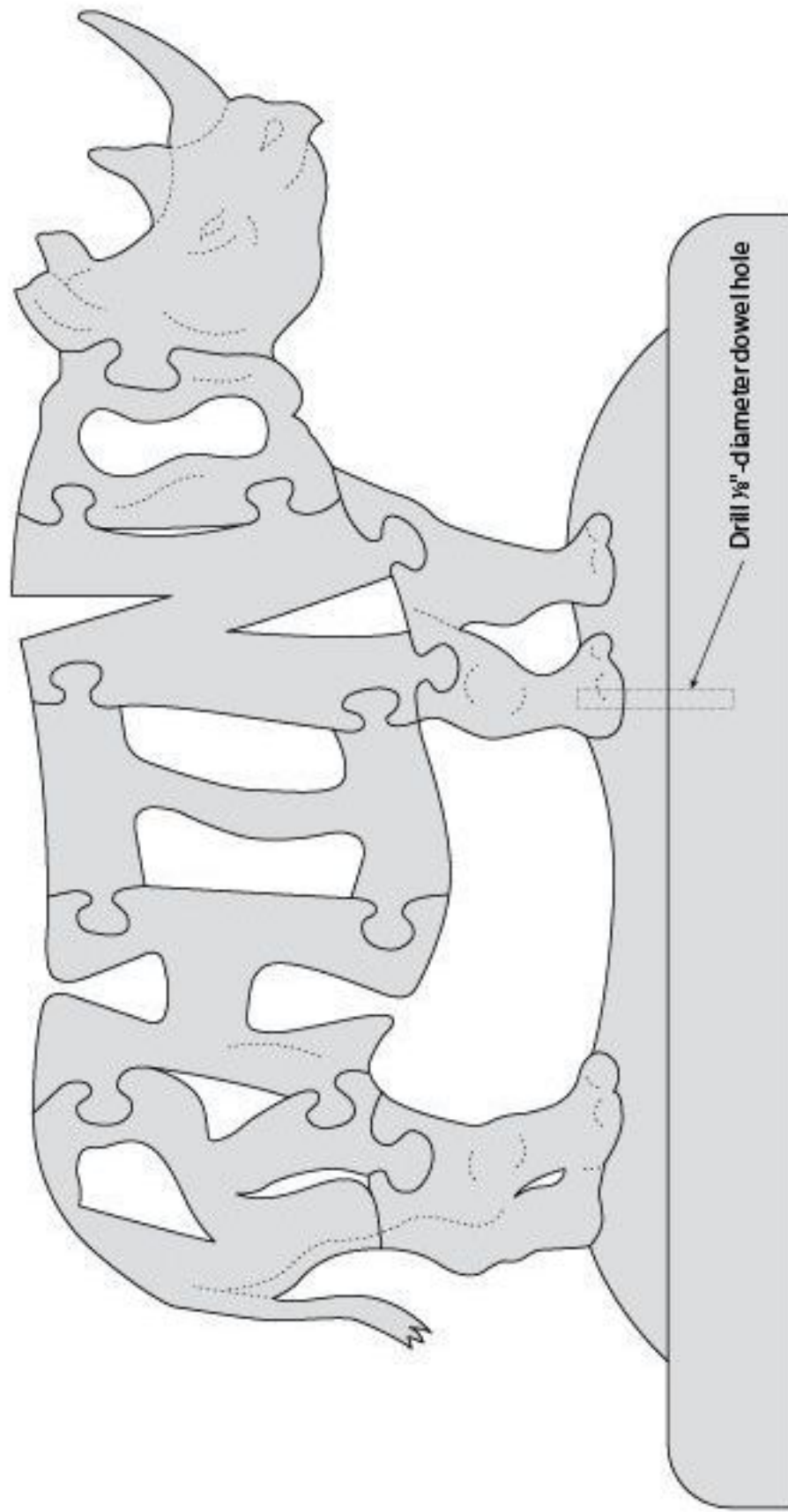


Hippo Woodima®
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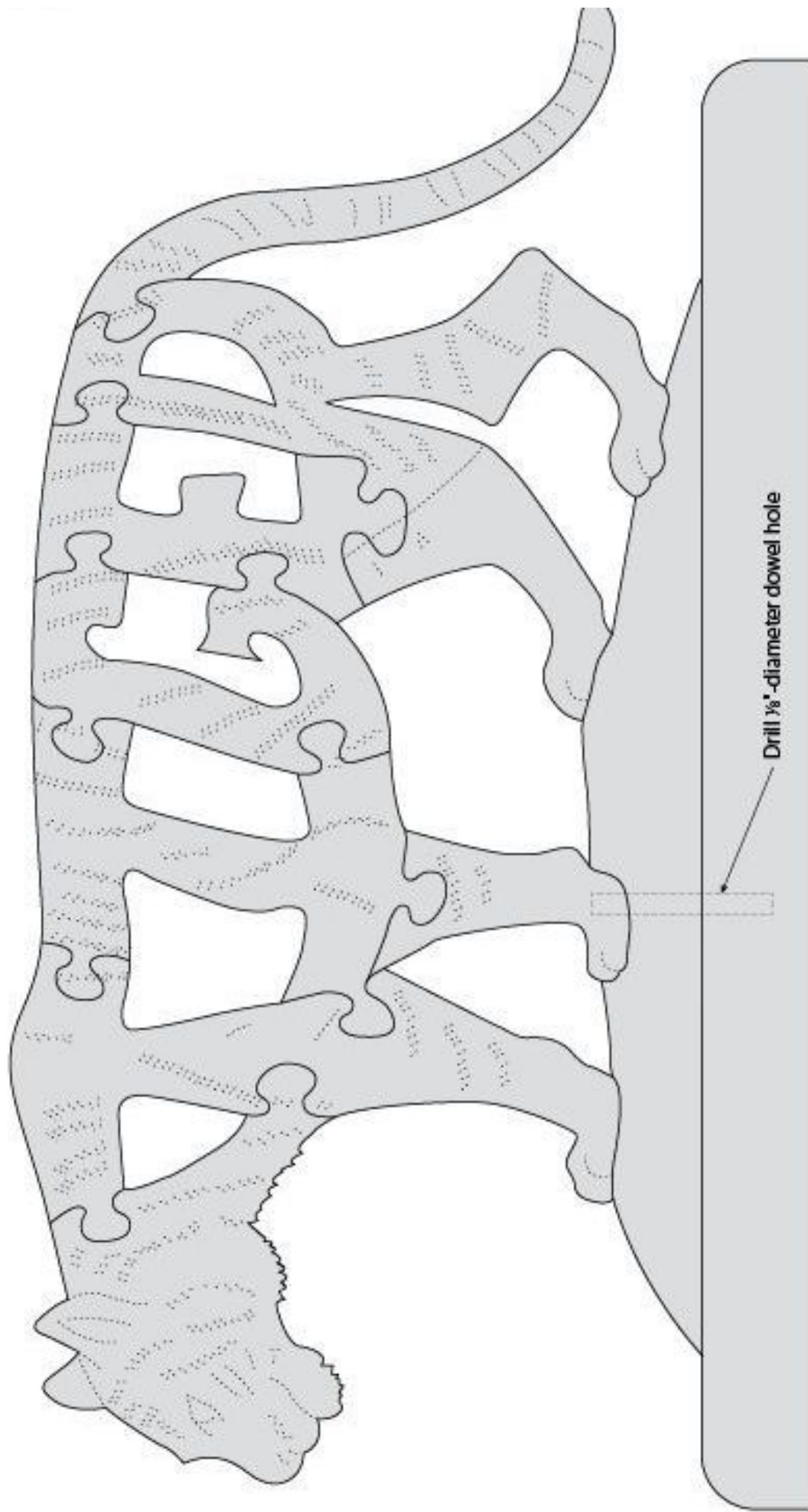




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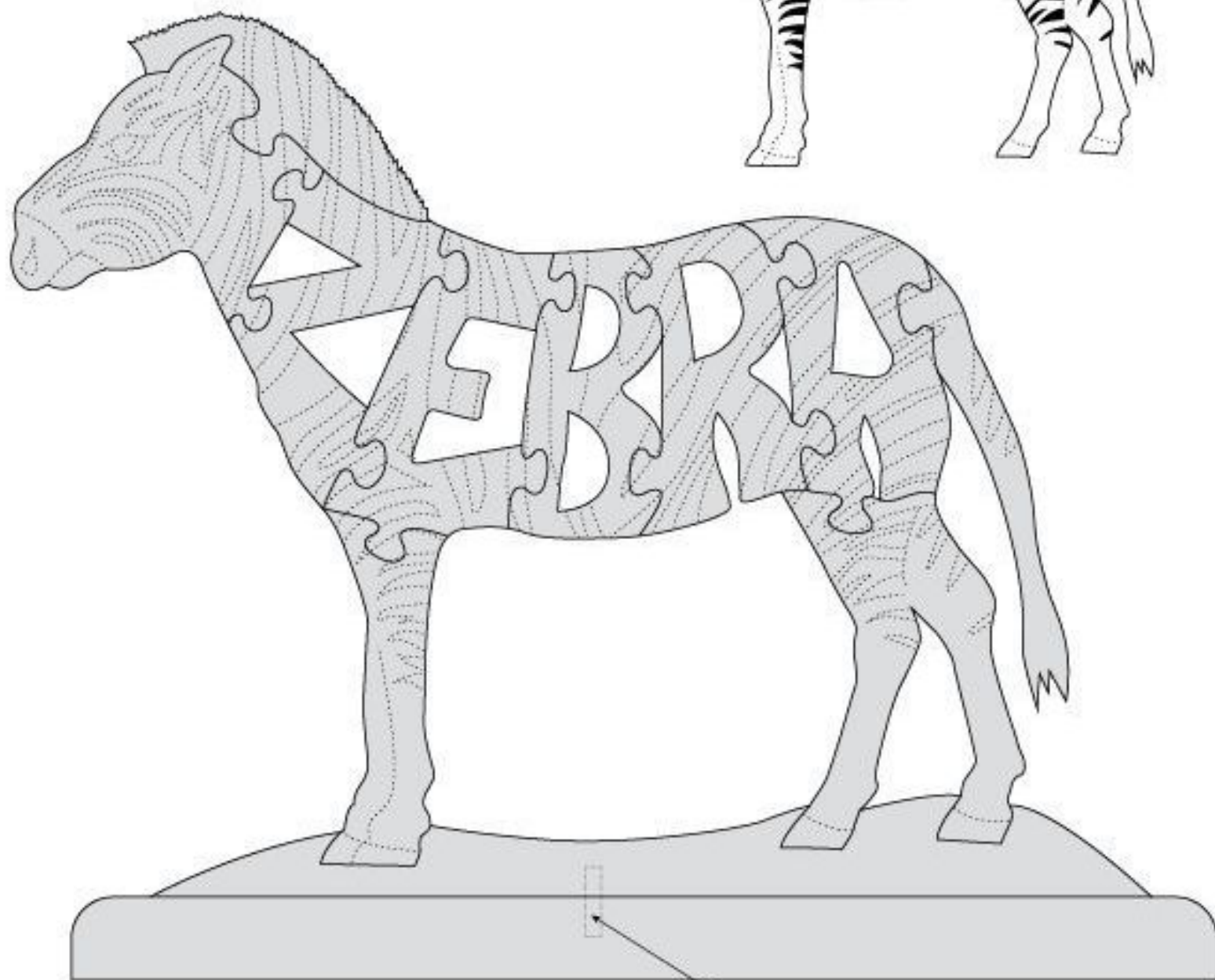
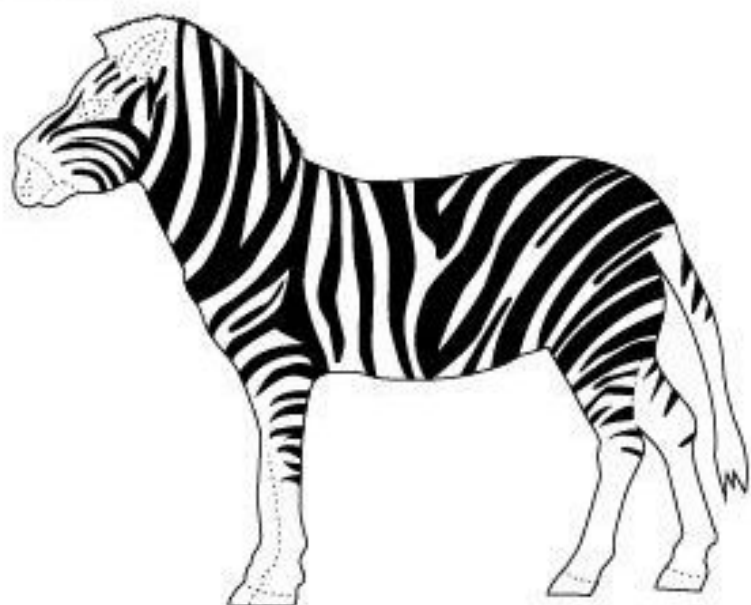


Rhino Woodimal®
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Tiger Woodimal®
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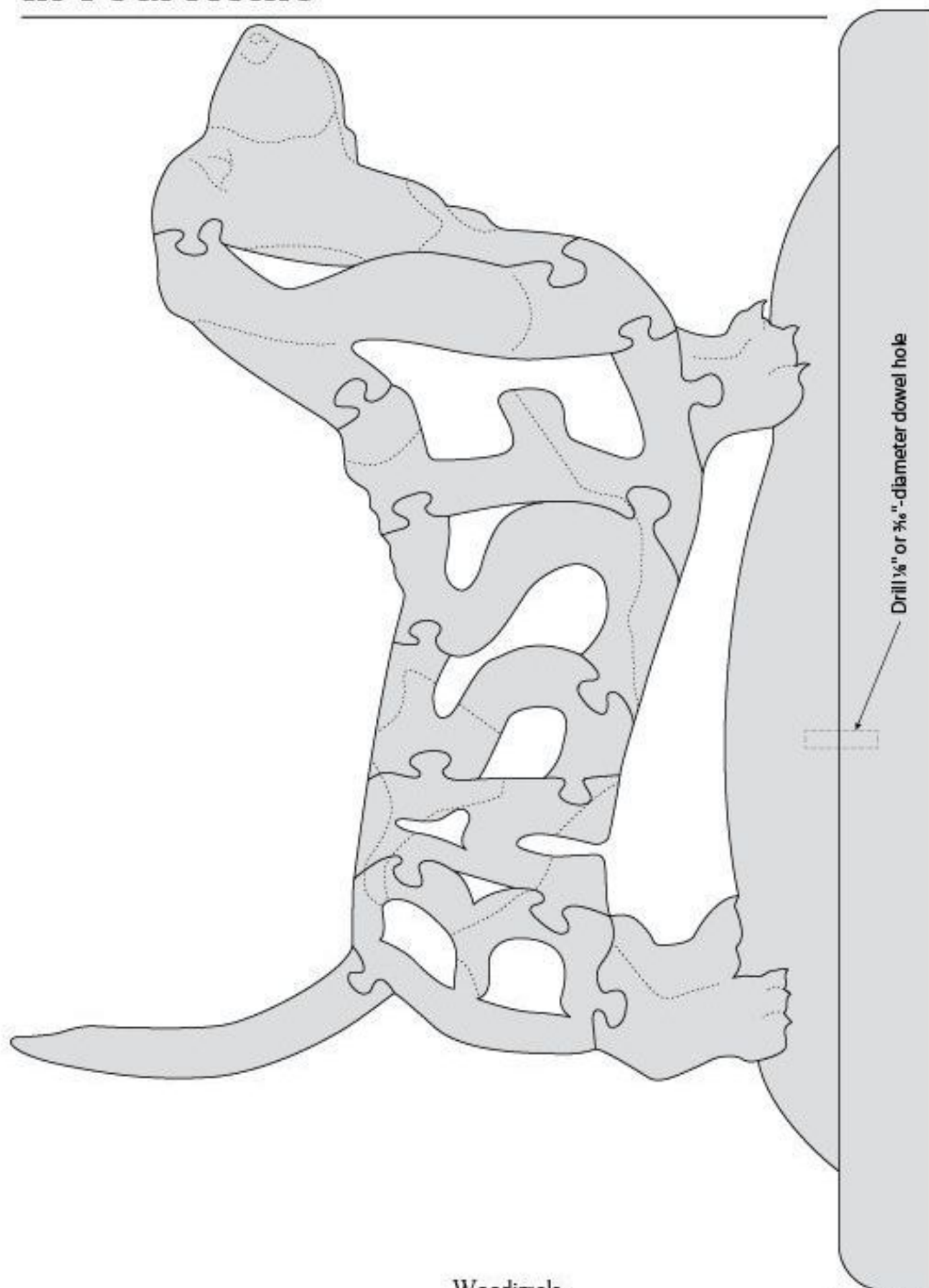
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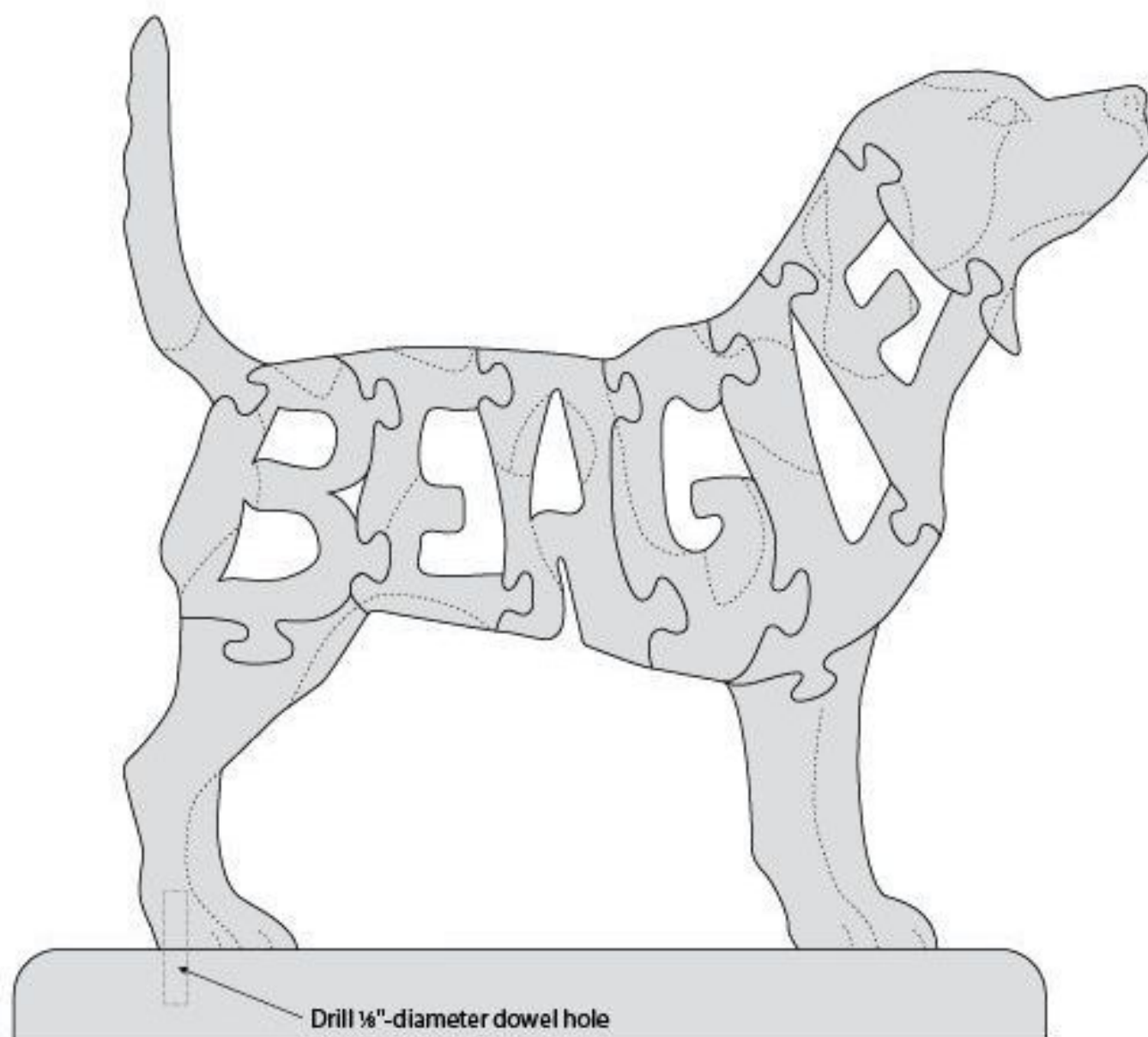
Zebra Woodimal®
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Drill 1/8"-diameter dowel hole

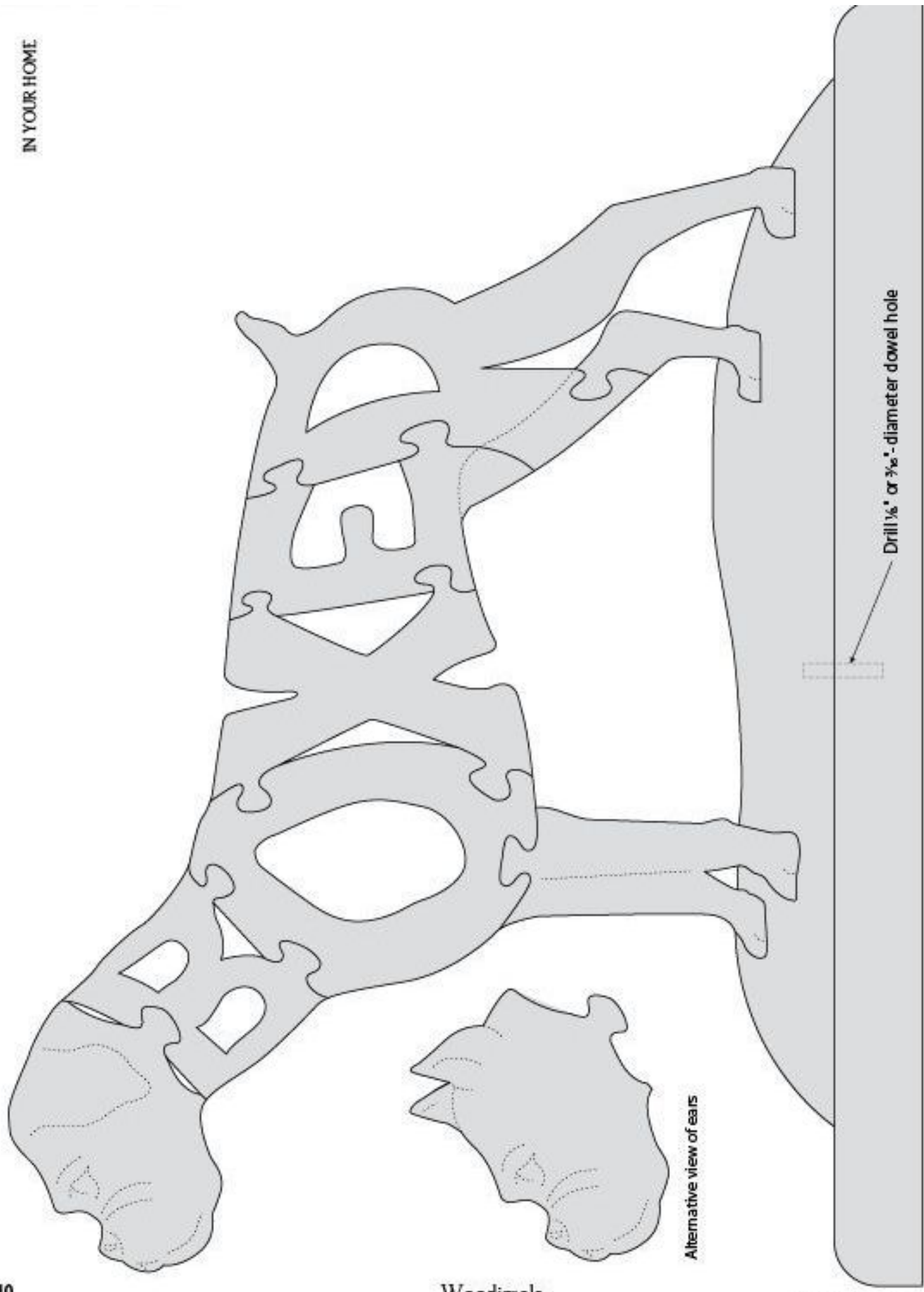
In Your Home

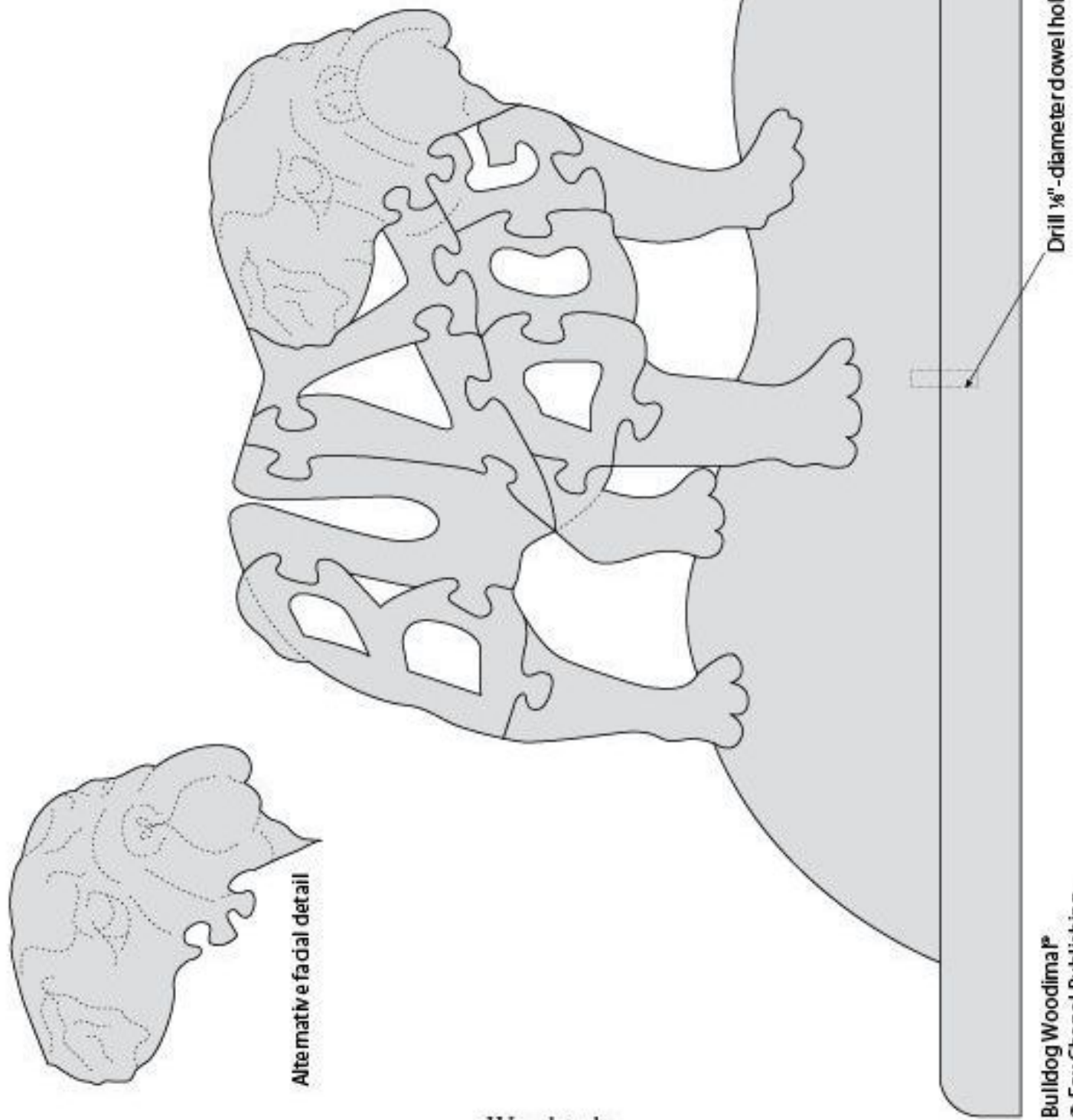


Drill $\frac{1}{8}$ " or $\frac{3}{16}$ "-diameter dowel hole



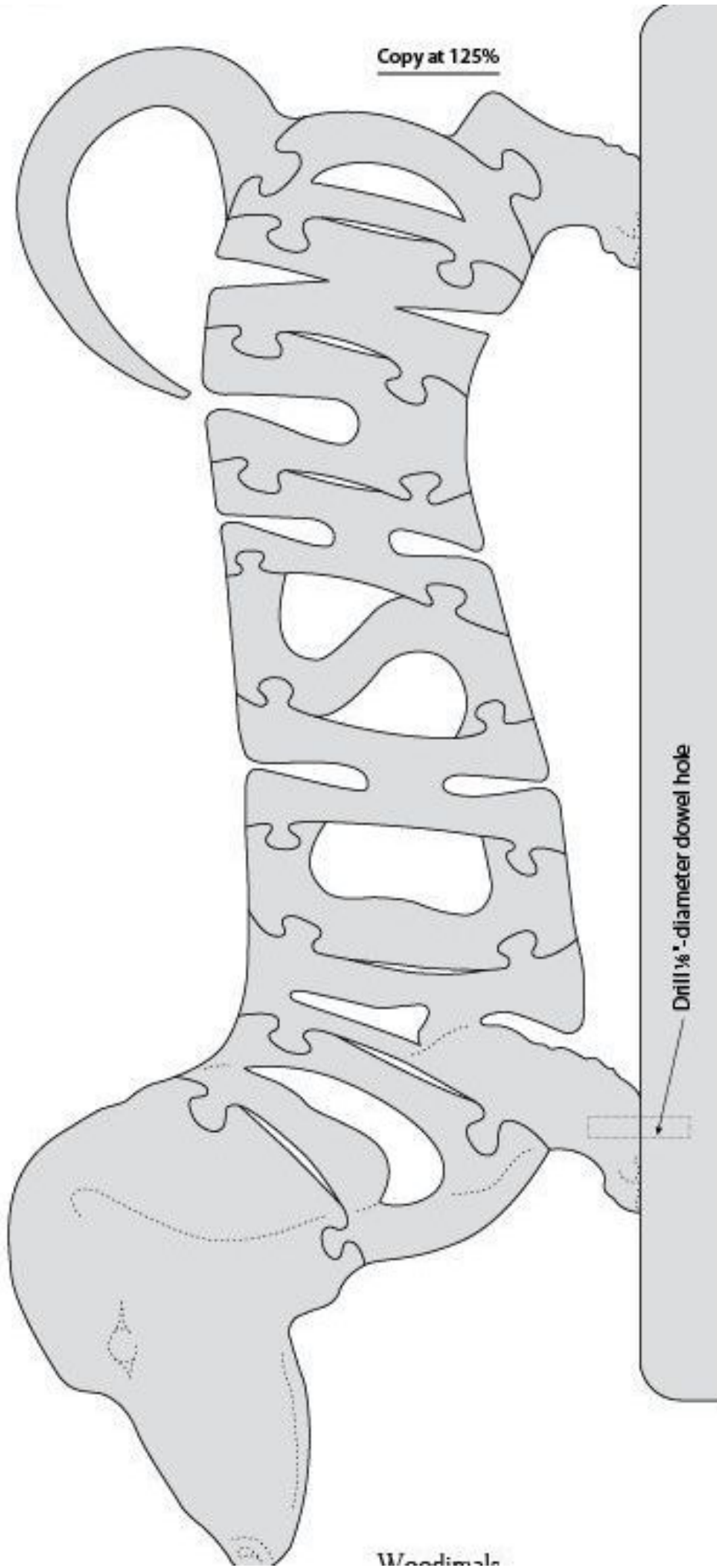
Beagle Woodimal®
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Alternative facial detail

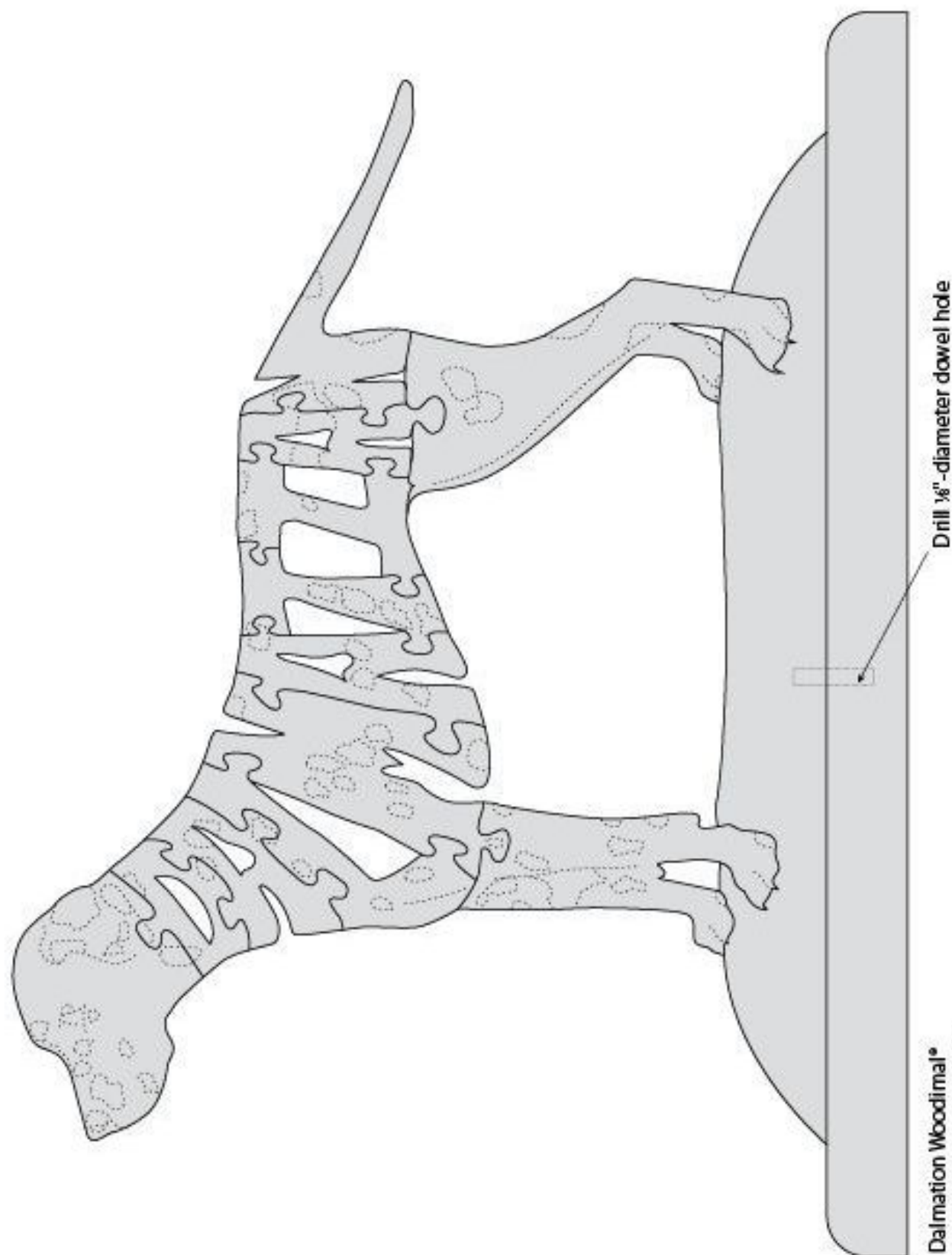
Drill 1/8" -diameter dowel hole



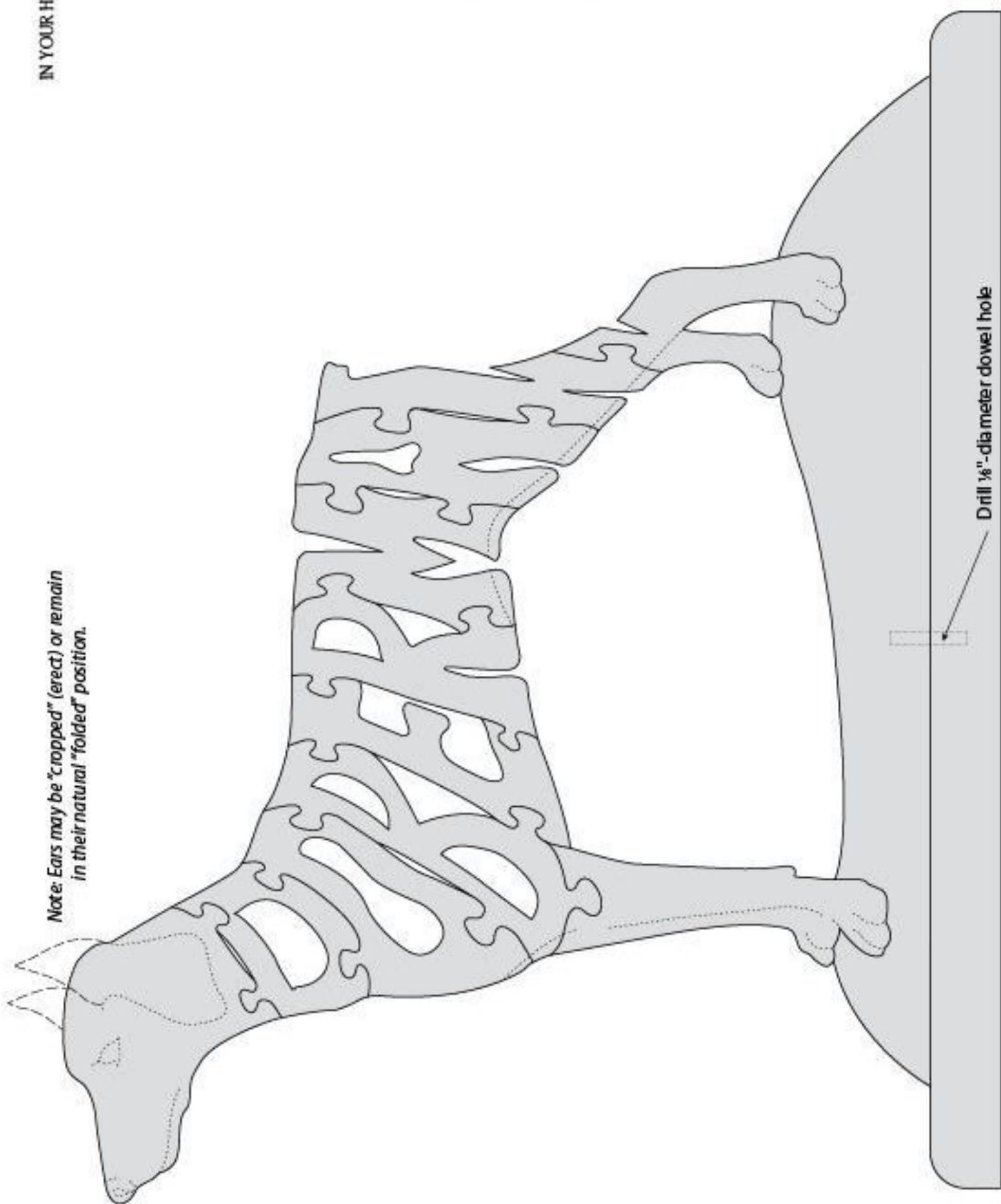
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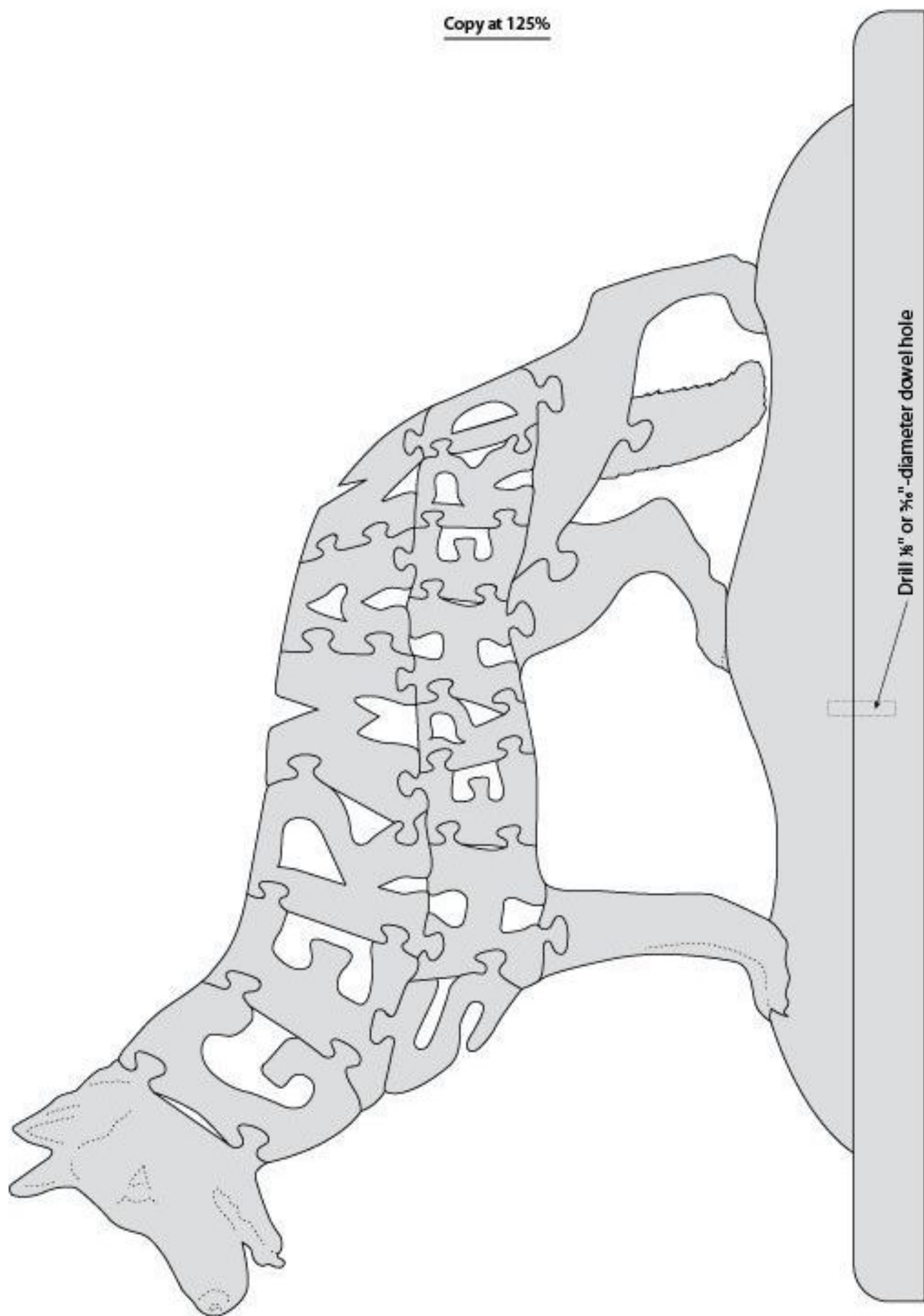
Drill $\frac{1}{8}$ "-diameter dowel hole

Dachshund Woodima™
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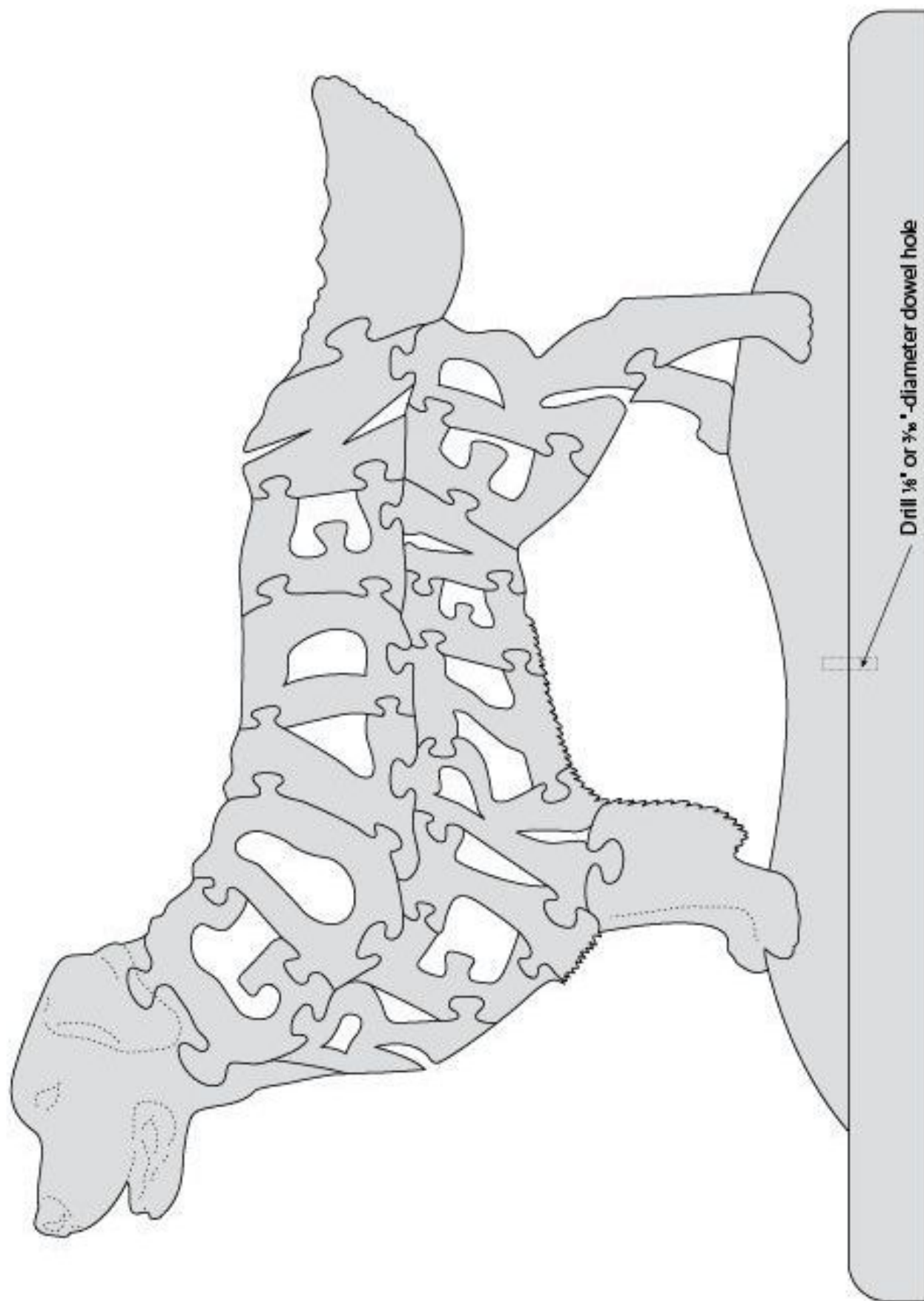


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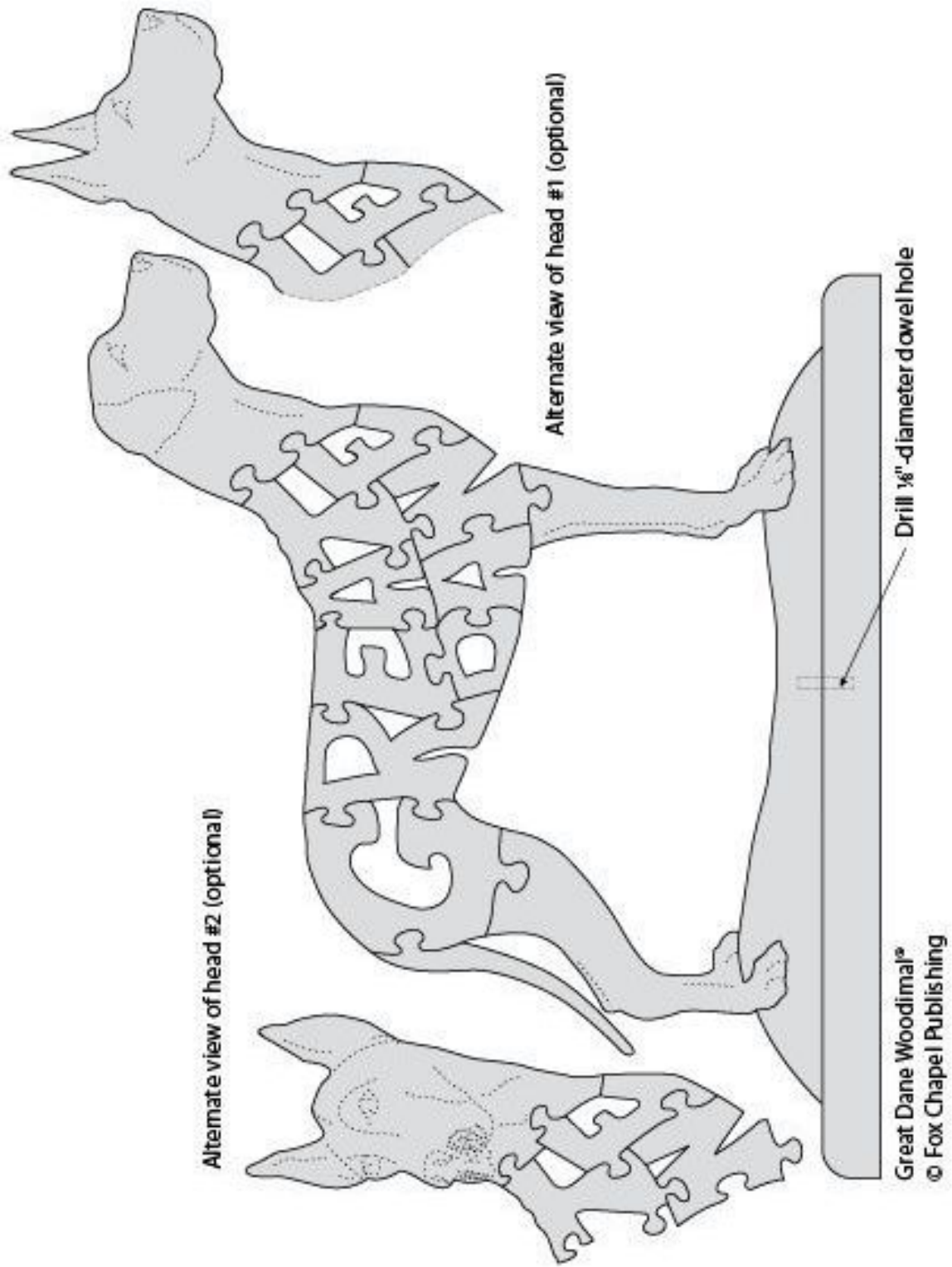


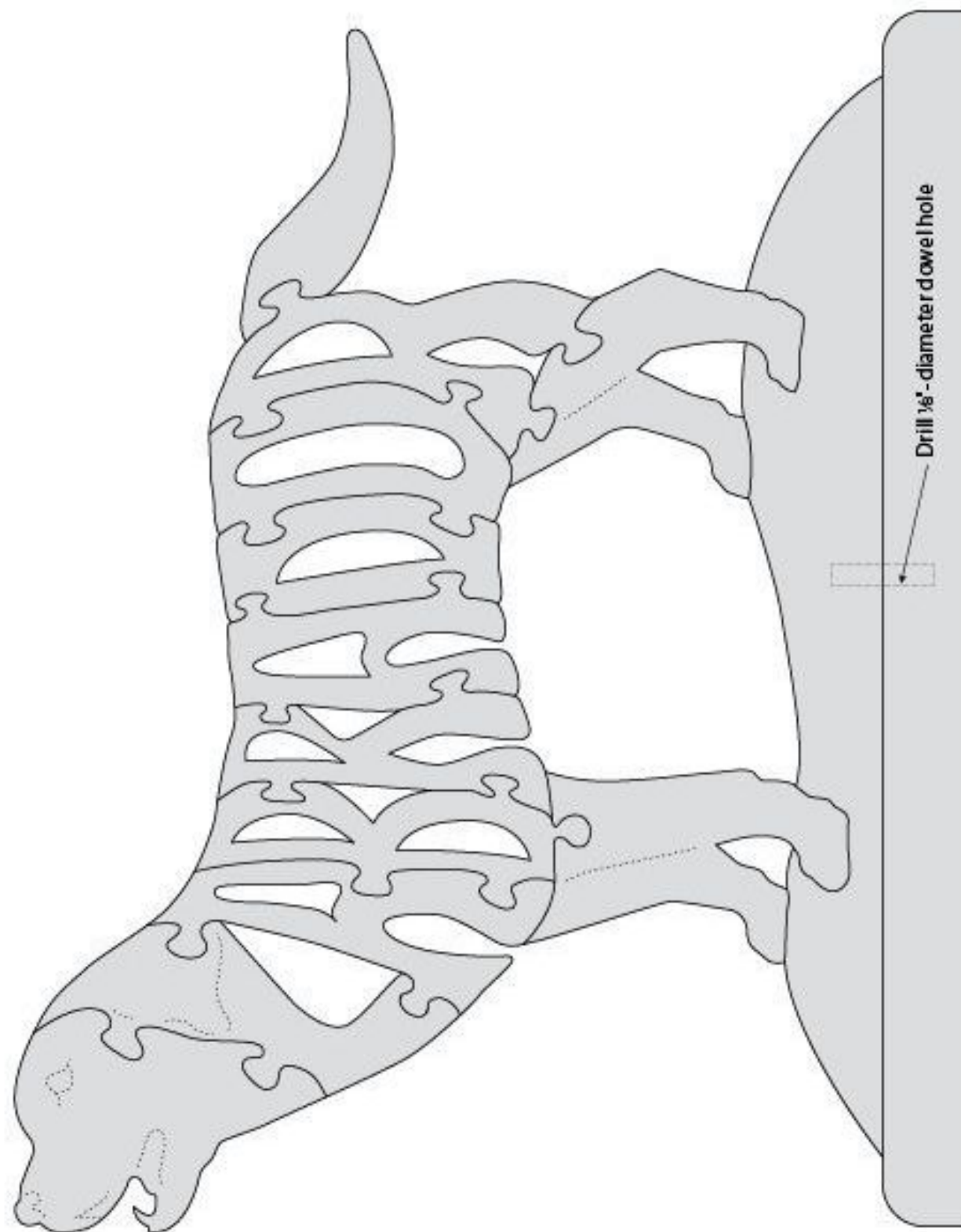
German Shepherd Woodimal®
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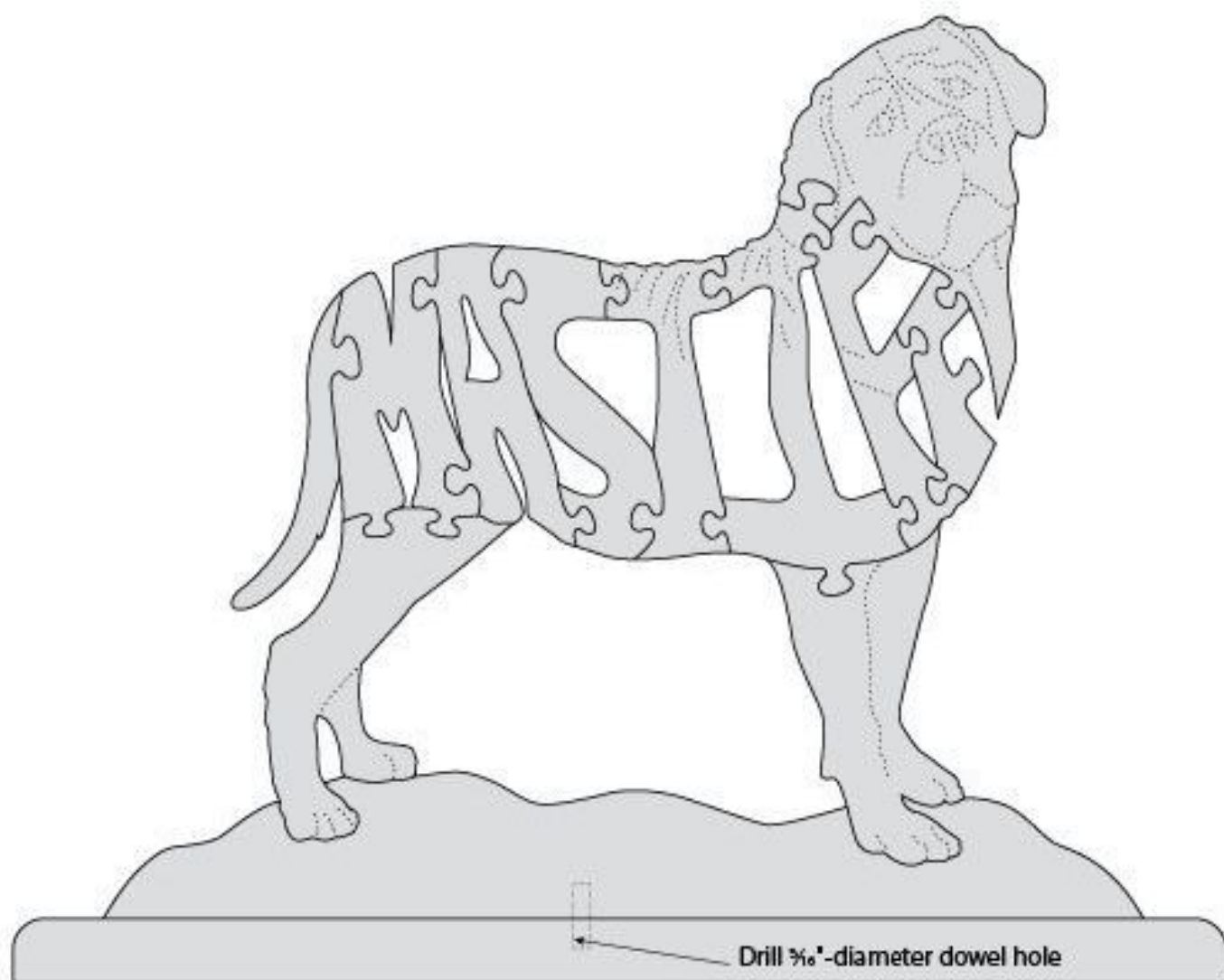
Drill $\frac{1}{8}$ " or $\frac{3}{16}$ " diameter dowel hole

Golden Retriever Woodimble®
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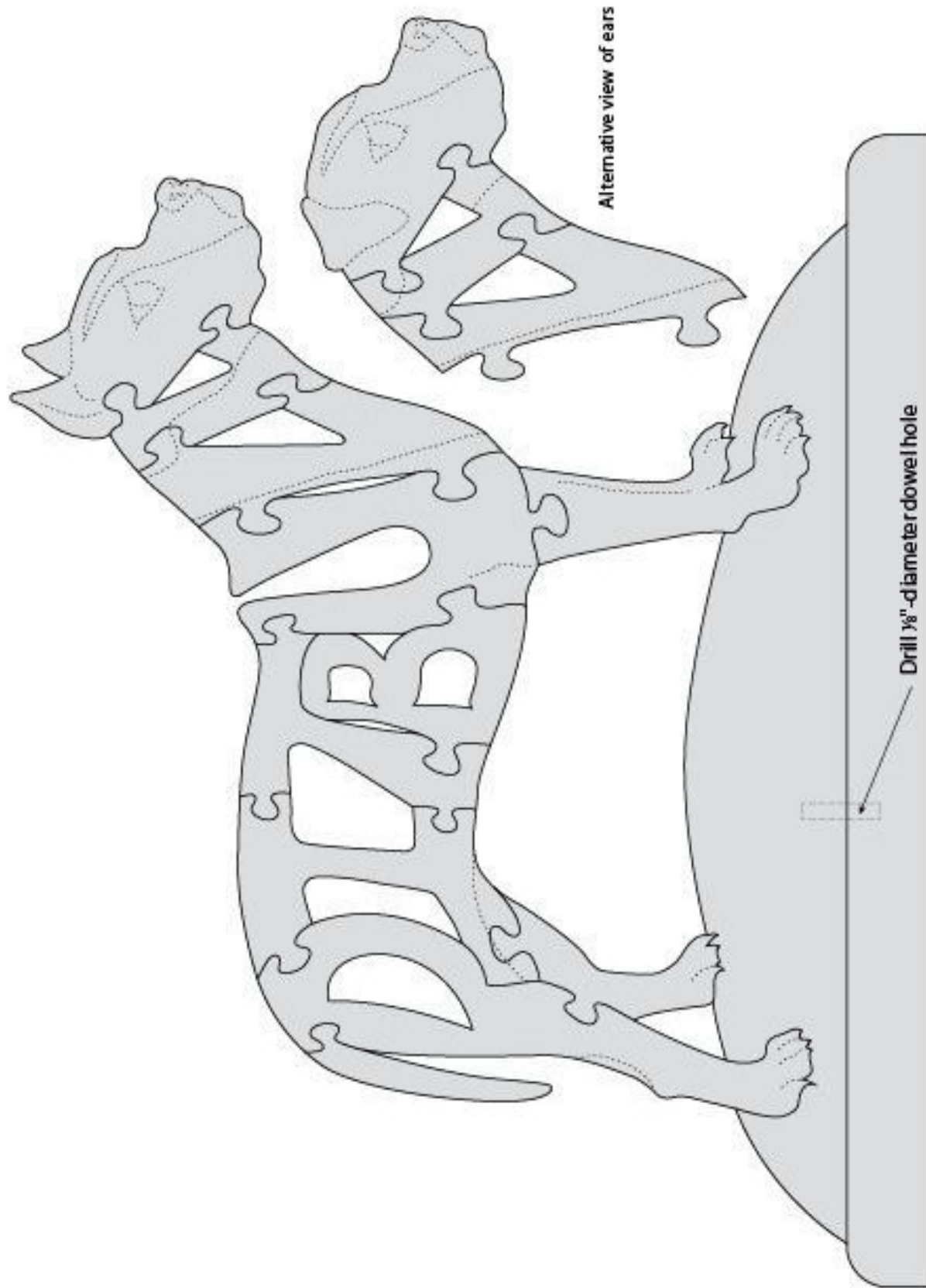




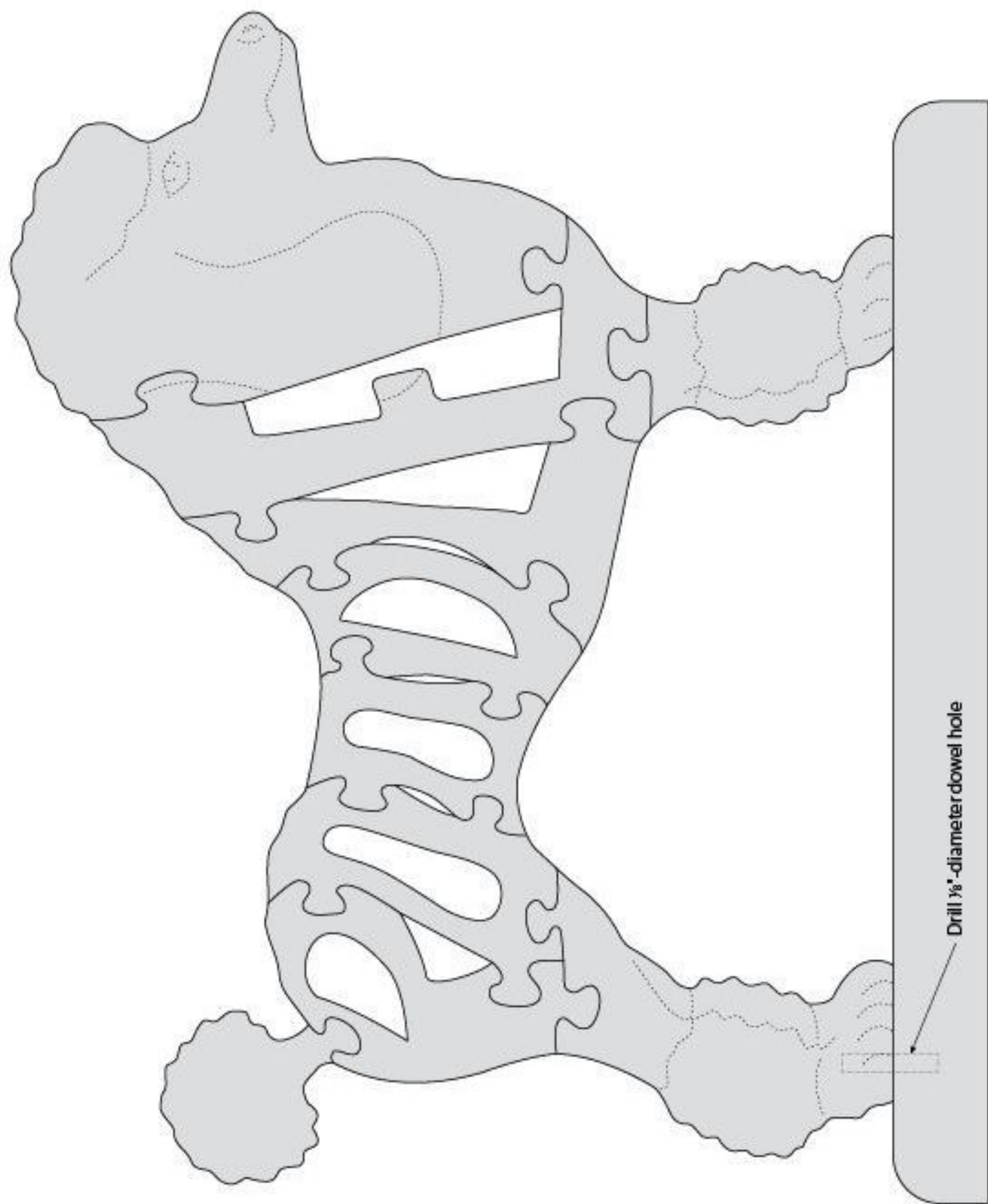
Labrador Woodimal®
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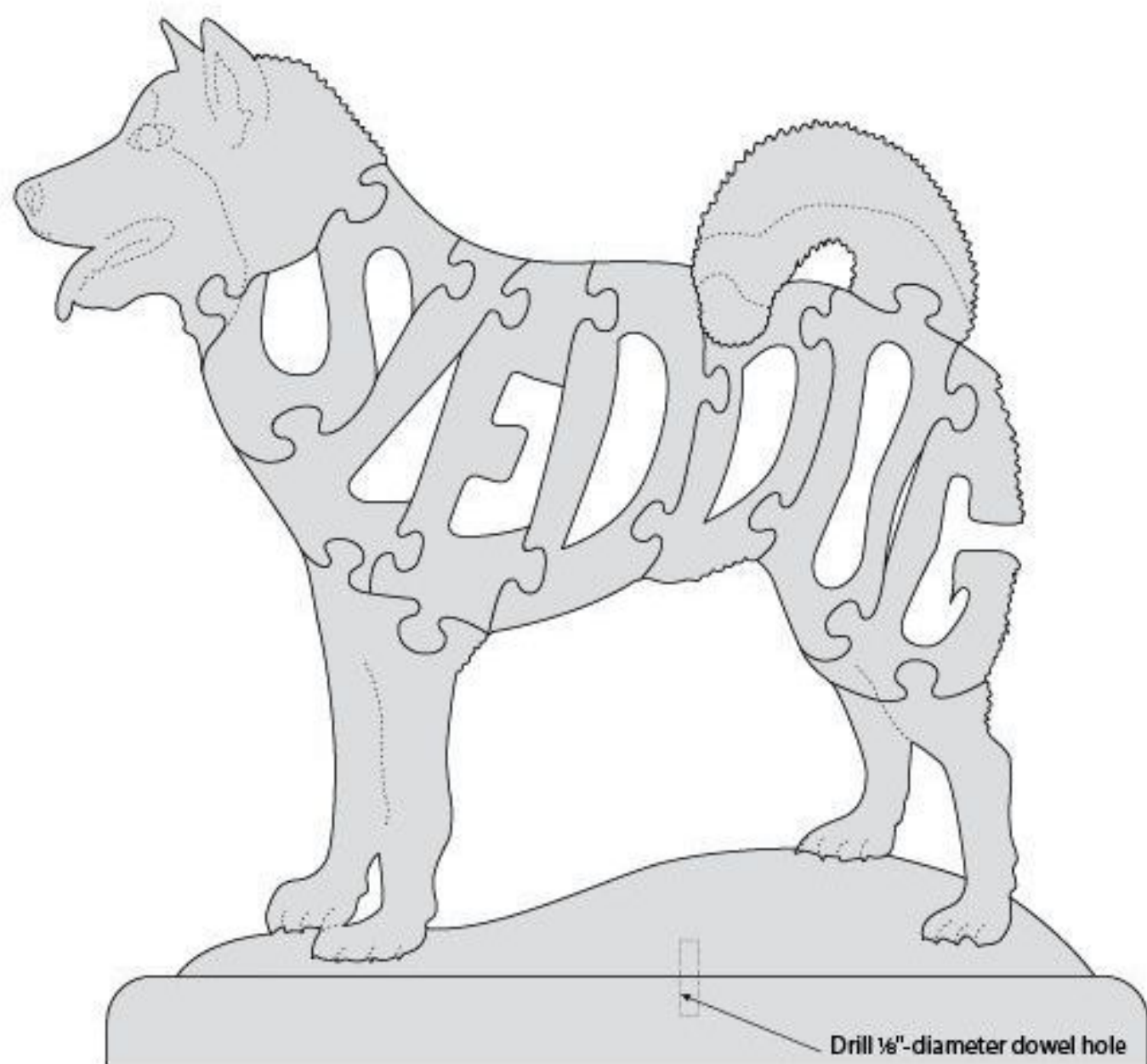


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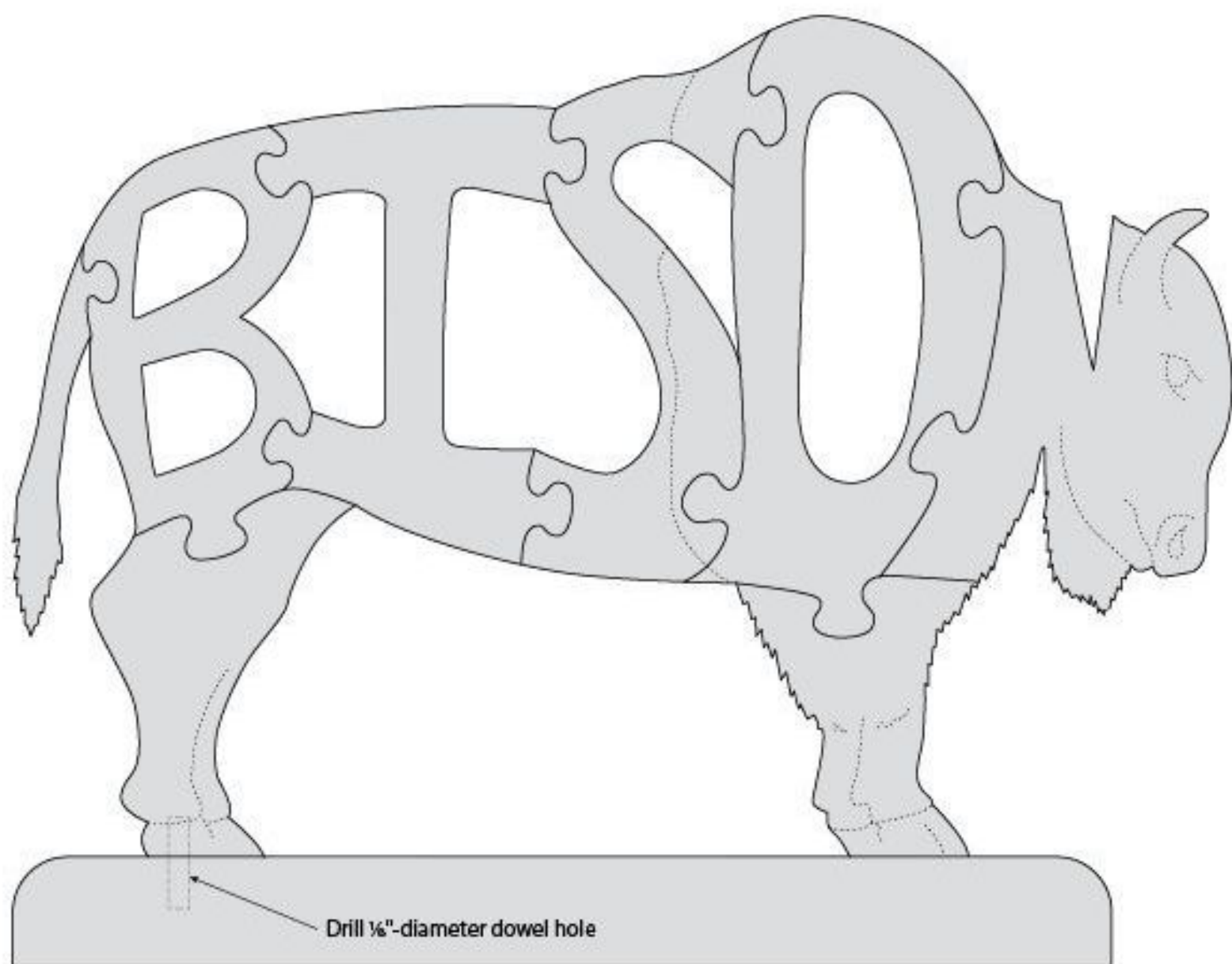
Pit Bull Woodimal®
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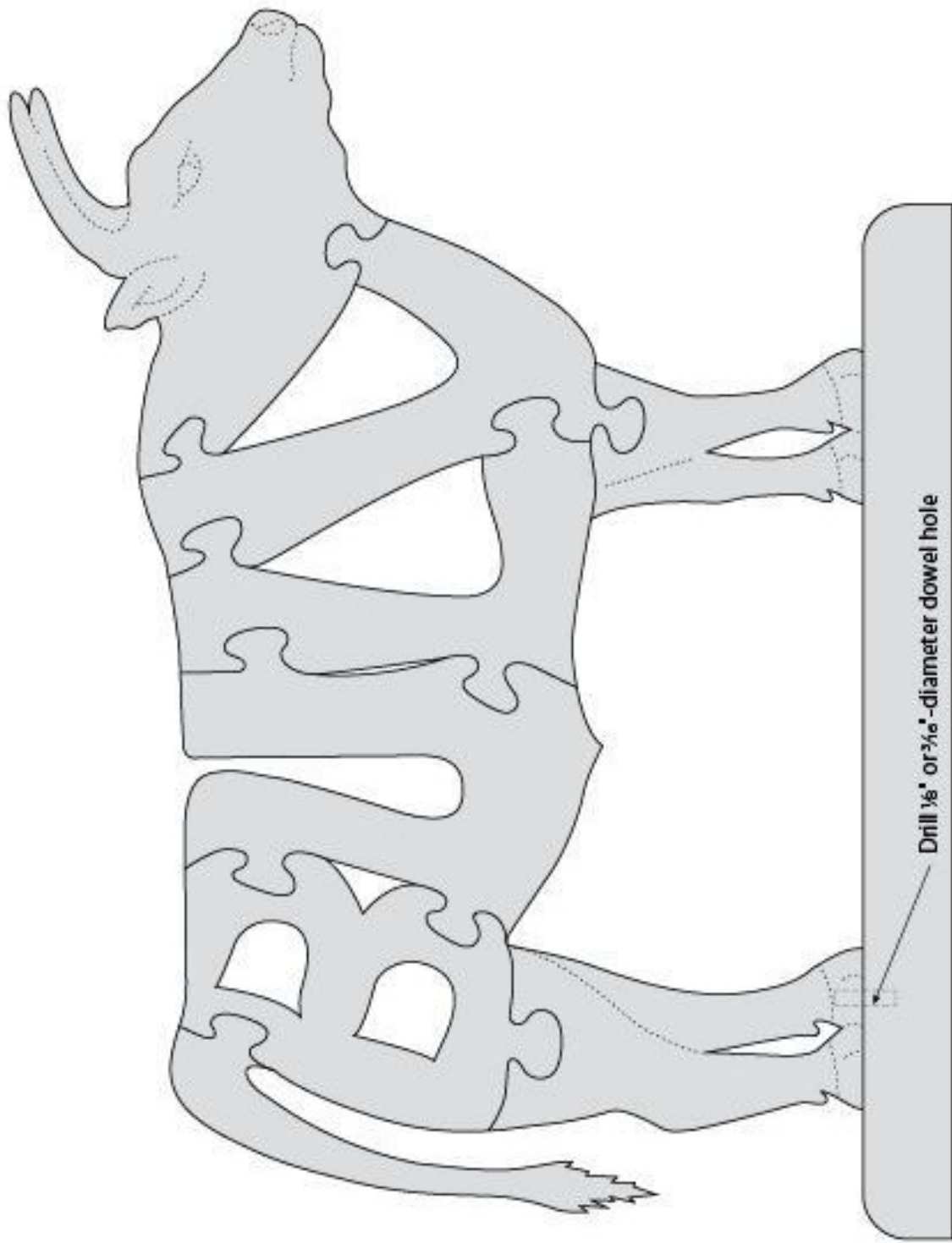


Sled Dog Woodimal®
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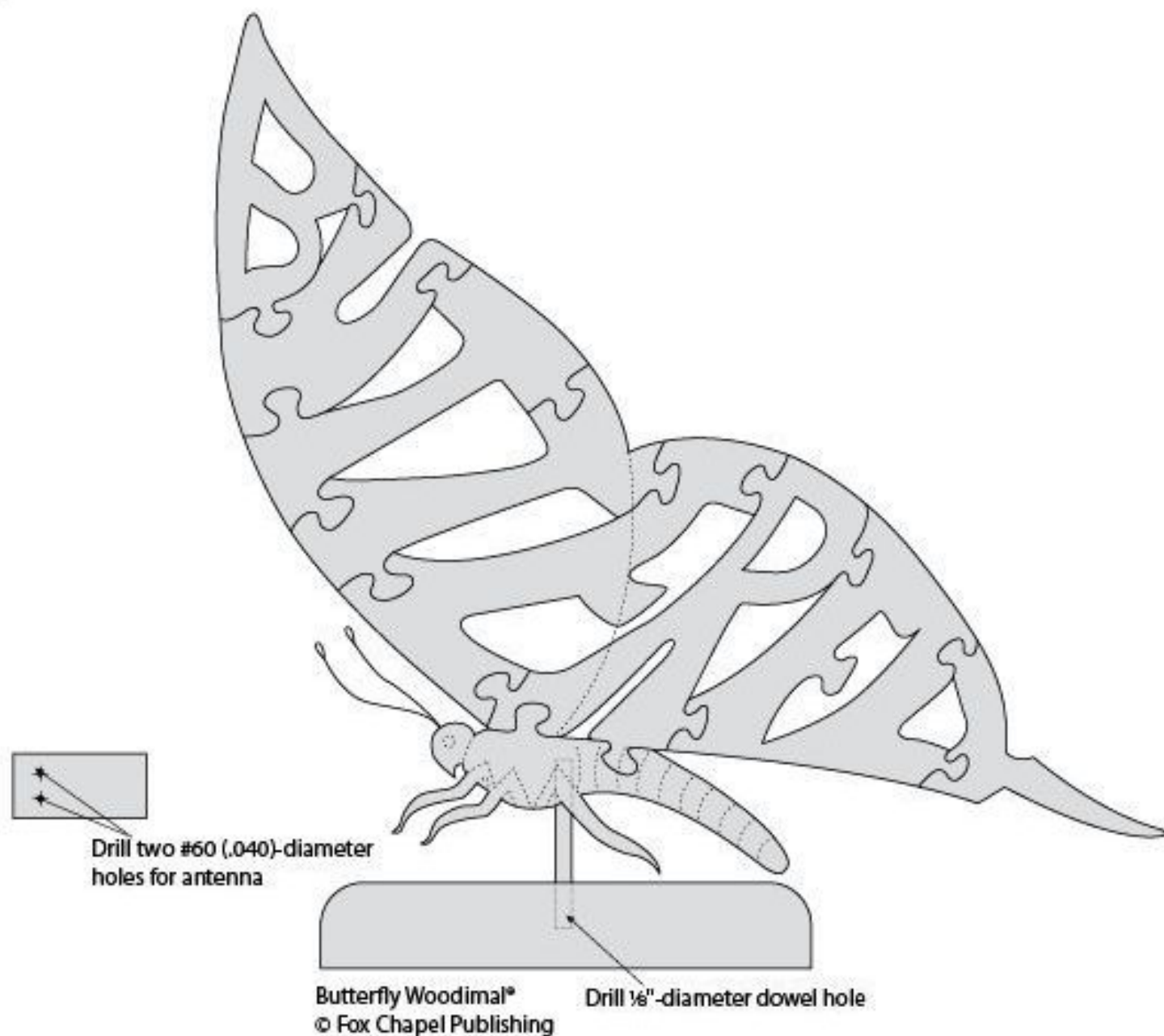
Other Great Woodimal Puzzles

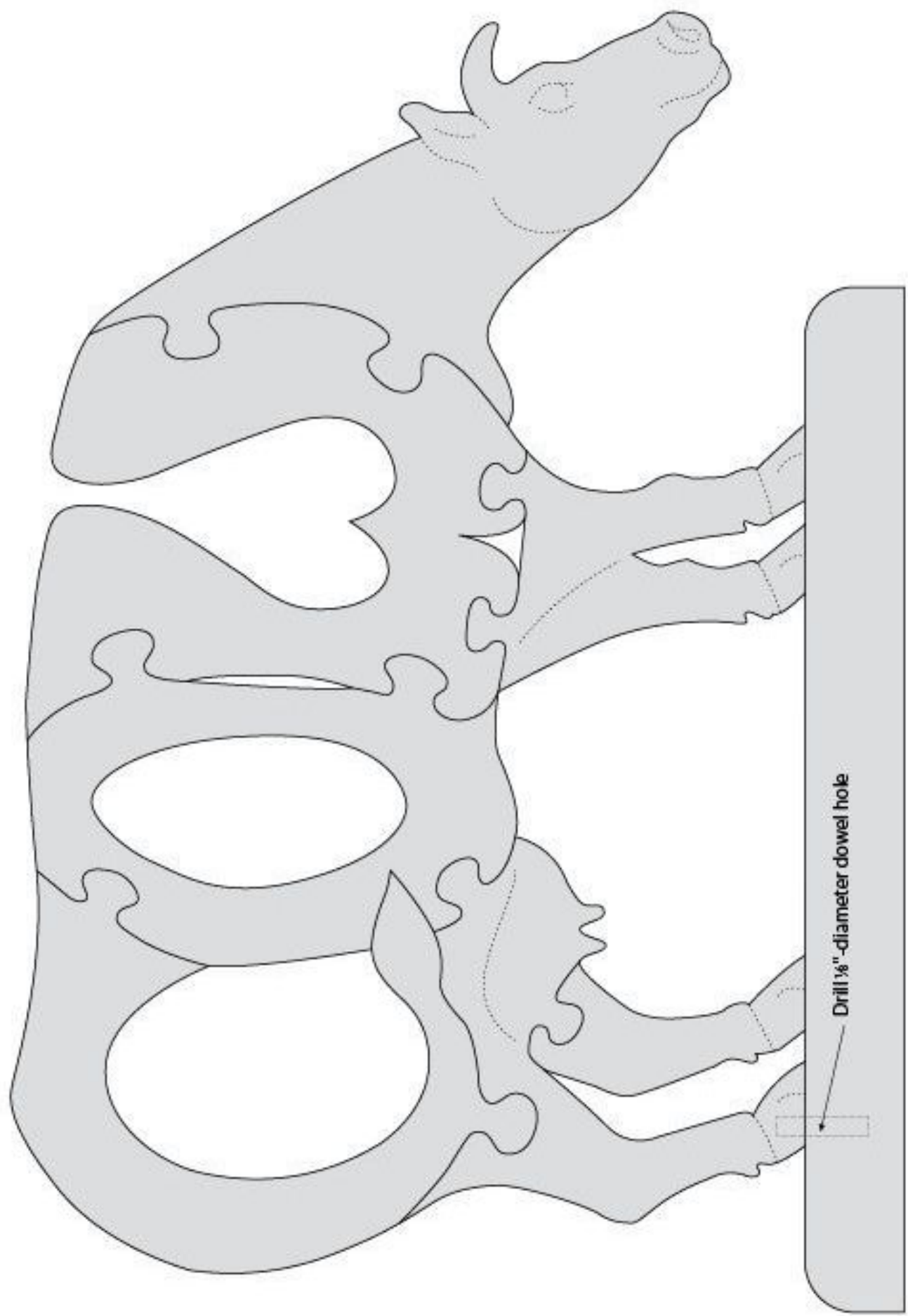


Bison Woodimal®
© Fox Chapel Publishing

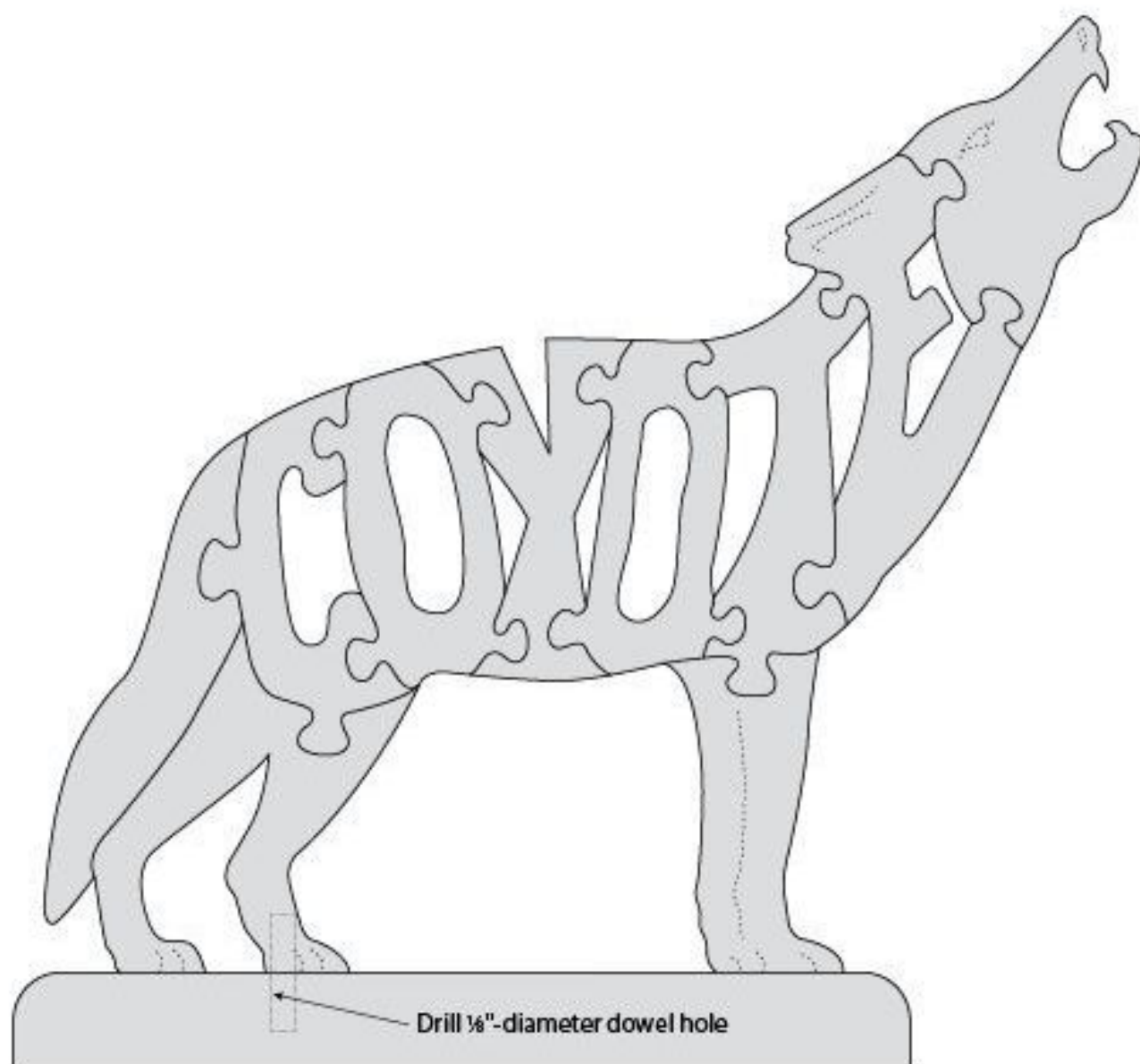


Bull Woodimal®
© Fox Chapel Publishing

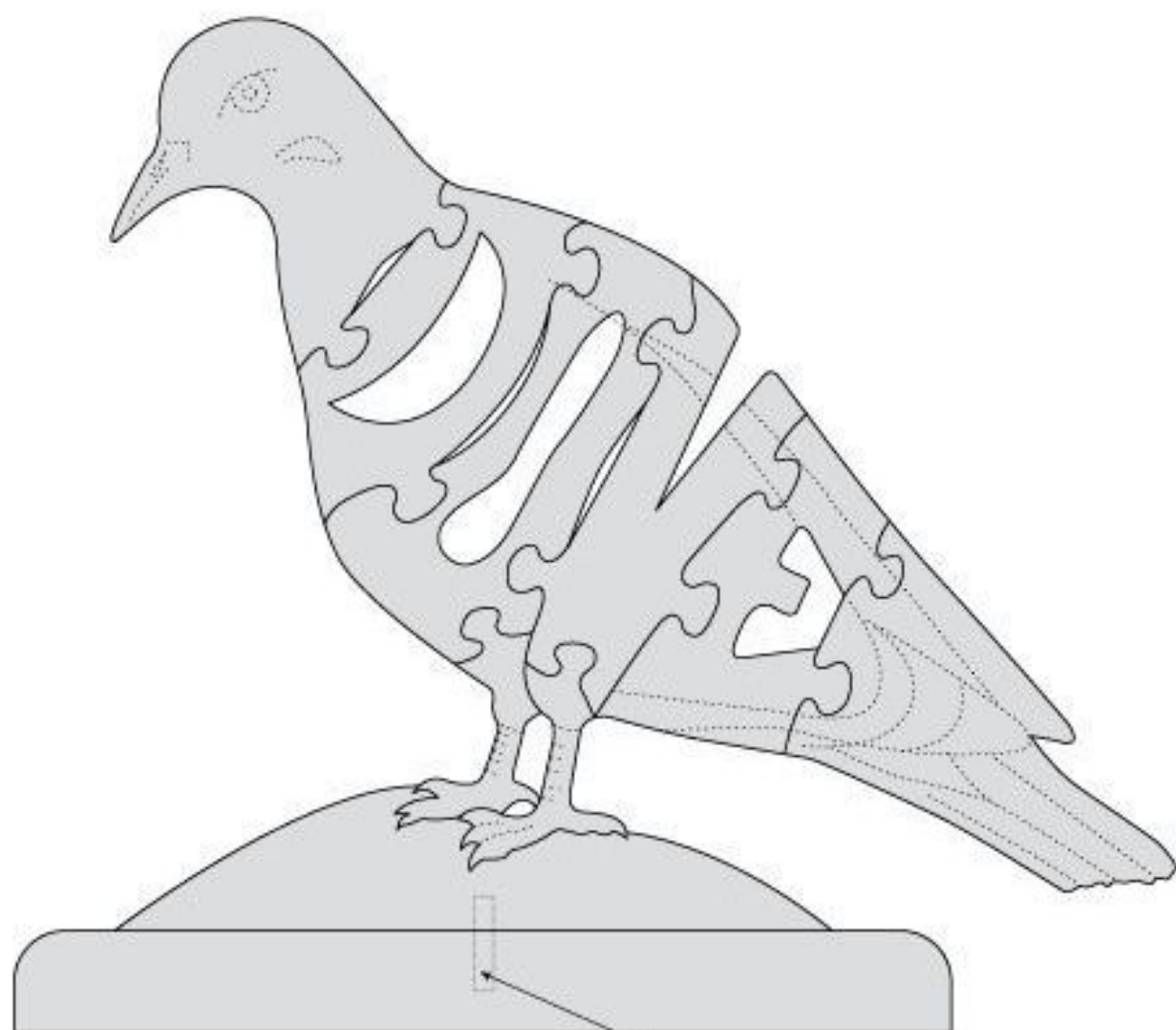




Cow Woodimal®
© Fox Chapel Publishing

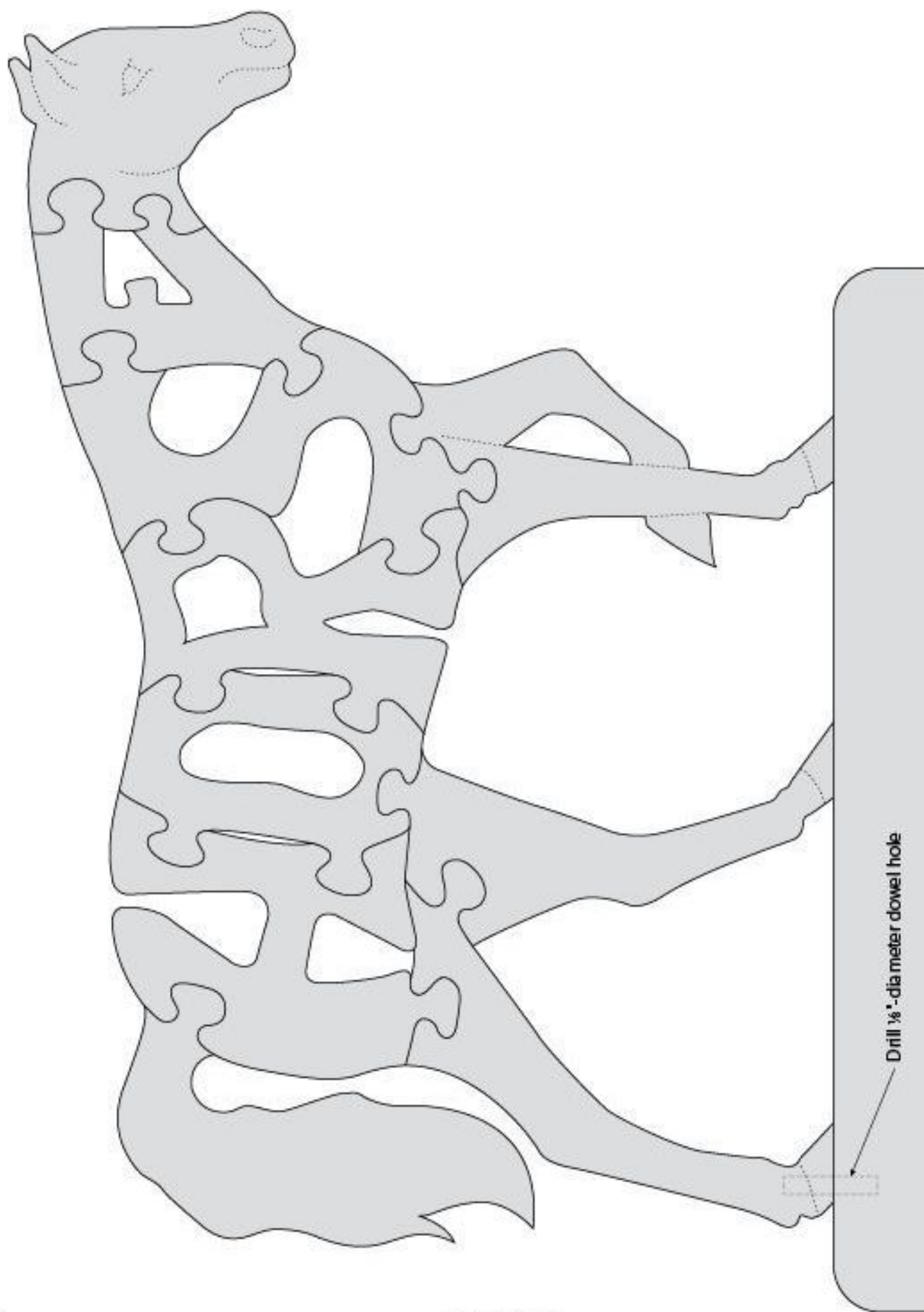


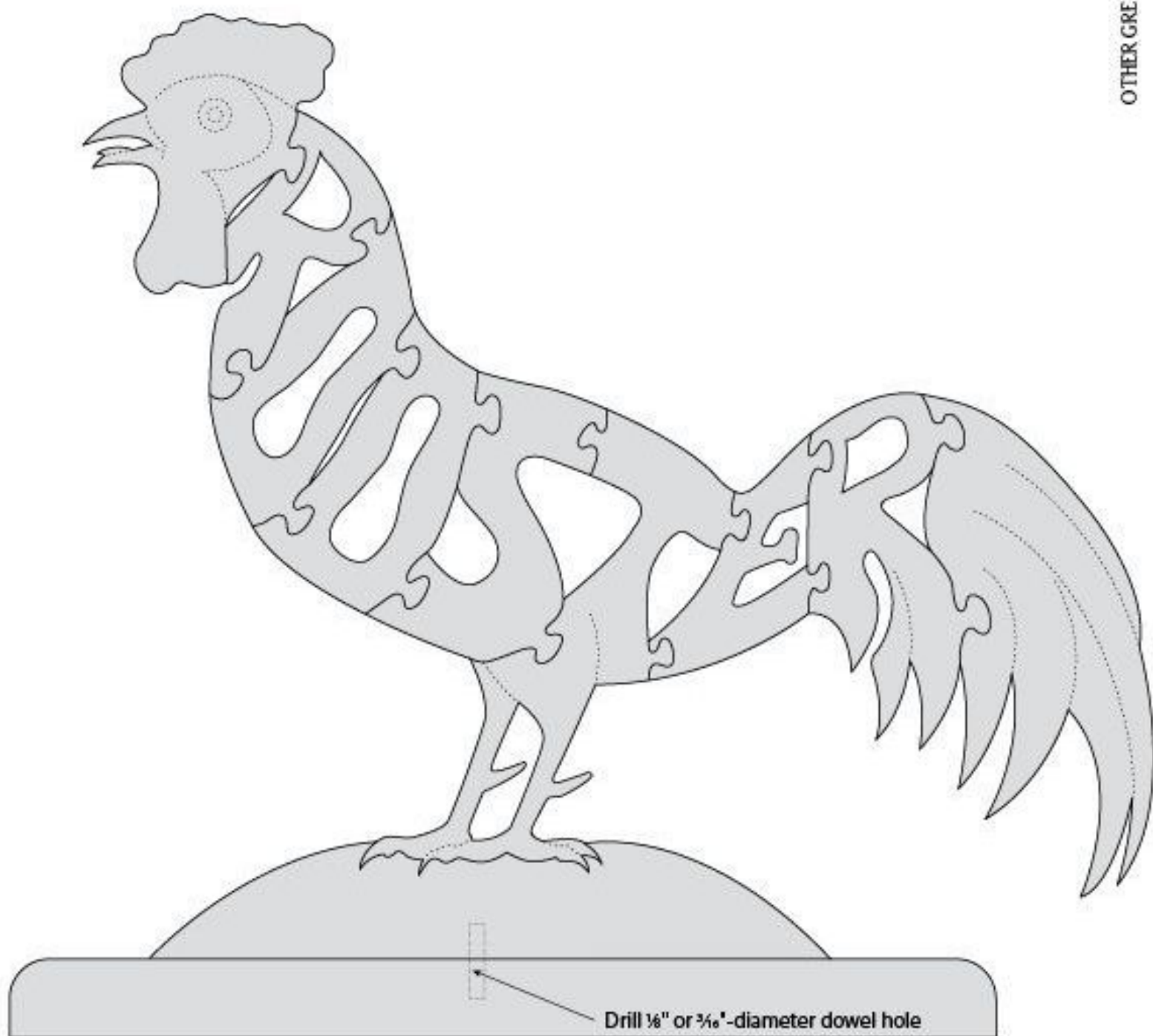
Coyote Woodimal®
© Fox Chapel Publishing



Dove Woodimal®
© Fox Chapel Publishing

Drill 1/8"-diameter dowel hole





Rooster Woodimal®
© Fox Chapel Publishing

Additional Woodimal® Patterns

The following Woodimal® patterns are available for purchase at www.woodimals.com.

Afghan Hound	Bedlington Terrier (Terrier)	Burro	Dragon (Winged, large)	Goshawk
Airedale (Nose to Tail)	Belgian Sheepdog	Buzzard	Dragon (Winged, small)	Grackle
Airedale (Tail to Nose)	Belgian Tervuren	Calm Terrier	Drake	Grasshopper
Akita	Belgian Tervuren (Belgian)	Camel	Dressage (Horse and rider)	Gray Whale
Alaskan Malamute	Belgian Tervuren (Tervuren)	Cardinal	Eagle	Great Pyrenees
Alaskan Malamute (Polar Inuit)	Bemese Mountain Dog (Bernese)	Cat (Persian)	Eagle (Wings raised)	Great Swiss Mountain Dog (Great Swiss)
Alligator	Bemese Mountain Dog (Mountain Dog)	Catfish	Elephant (Africa)	Great Swiss Mountain Dog (Mountain Dog)
Alligator (Gator)	Bichon Frise (Bichon)	Cavalier King Charles Spaniel (Cavalier)	Elephant (Tail to Nose)	Greyhound
Alpaca	Bichon Frise (Frise)	Cavalier King Charles Spaniel (King Charles)	Elephant Seal	Griffin 1
Alsatian	Bison	Chesapeake 1	Elk (Standing)	Griffin 2
American Buffalo	Blue Heeler	Chesapeake 2	Elk (Walking)	Griffon
American Eskimo	Bluefish	Chickadee	Elkhound	Grizzly
American Staffordshire Terrier (American)	Bluejay	Chihuahua	Emu	Grizzly (On hind legs)
American Staffordshire Terrier (Staffordshire)	Bobcat	Chihuahua (Long haired)	English Pointer	Grizzly Bear
American Staffordshire Terrier (Terrier)	Bobwhite	Chinese Crested	English Setter	Groundhog
American Water Spaniel	Border Collie	Chipmunk	English Sheepdog	Gryphon
Ant	Border Terrier (Head turned right)	Chipmunk (Chippie)	English Toy Spaniel	Guinea Pig
Anteater	Border Terrier (Profile)	Chow Chow	Ermine	Hamster
Antelope	Border Terrier (Terrier)	Clydesdale	Ferret	Harrier
Antelope (Pronghorn)	Borzoi	Cockatiel (Nose to Tail)	Flat Coated Retriever	Havanese
Ape	Boston Terrier	Cockatiel (Tail to Nose)	Flatfish	Hawk
Armadillo	Bouvier Des Flanders	Cockatoo	Flounder	Heinz 57
Australian Cattle Dog	Boykin Spaniel	Cocker Spaniel	Fluke	Hen
Australian Cattle Dog (Australian)	Briard	Coelacanth	Fox	Hereford
Australian Cattle Dog (Cattle Dog)	Brindled Gnu	Collie	Fox Terrier 1	Heron
Australian Shepherd	Brittany	Corgi	Fox Terrier 2	Horse (Shire)
Australian Shepherd (Aussie)	Broncho	Cougar	French Bulldog	Horse (Standing)
Australian Terrier	Bronco	Cougars (Single Image)	Gander	Hound
Badger	Brussels Griffon	Crow	German Shepherd (Police K9)	Hummingbird (Hummer)
Basenji	Buffalo	Dachshund (Tail to Nose)	German Short-hair Pointer	Humpback Whale
Bass (Lakeside)	Bull (Rear legs raised)	Dandie Dinmont (Dandie)	German Wire-hair Pointer	Husky
Bear (Standing)	Bull Mastiff	Dandie Dinmont (Dinmont)	Gila Monster	Hyena
Bearded Collie (Beardie)	Bull Terrier	Dinosaur	Gila Monster (Gila)	I Heart Dogs (Lying down)
Beaver	Bulldog (Marines)	Dolphin 1	Giraffes (Dual Image)	I Heart Dogs (Sitting)
Bedlington Terrier (Bedlington)	Bulldog (USMC)	Dolphin 2	Goat	I Heart Mice
		Donkey	Goose	I Heart Mutts
			Gordon Setter	I Heart Pigs
			Gorilla	Irish Setter



How Do You Spell Fun? W-o-o-d-i-m-a-l!

Woodimals® are entertaining puzzles made in the shapes of familiar animals that incorporate the letters of the animal's name right in the design. They put a delightful spin on the classic scroll saw puzzle by appealing to two different levels of perception at once—the shape of the creature plus a clever presentation of its name. Woodimal creator Jim Sweet shows you how to make 56 of his most intriguing critters in this pattern-packed book.

Woodimals spells fun for all ages. Educational, decorative and enjoyable, they provide hours of fun for anyone with a scroll saw who likes to make wooden puzzles. Turn your workshop into a classroom for your children or grandchildren, and present them with an engaging and interactive learning experience. These interlocking animal puzzles make perfect gifts for young children just learning how to read.

The book starts out with two step-by-step projects to introduce you to the basics of scrolling and mounting a Woodimal puzzle, along with recommendations about the types of wood to use, adding details, and finishing. The patterns are drawn in fine lines, making cutting with a thin scroll saw blade both easy and achievable.



INSIDE YOU'LL FIND 56 CREATIVE ANIMAL PUZZLE PATTERNS, INCLUDING:

- Popular Pets—Golden Retriever, Labrador, and Poodle Patterns
- Farm Animals—Rooster, Cow, and Horse Patterns
- Sea Creatures—Dolphin, Whale, and Shark Patterns
- Woodland Wildlife—Deer, Wolf, and Fox Patterns
- American Classics—Bison, Eagle, and Bear Patterns
- Exotic Animals—Flamingo, Giraffe, and Tiger Patterns