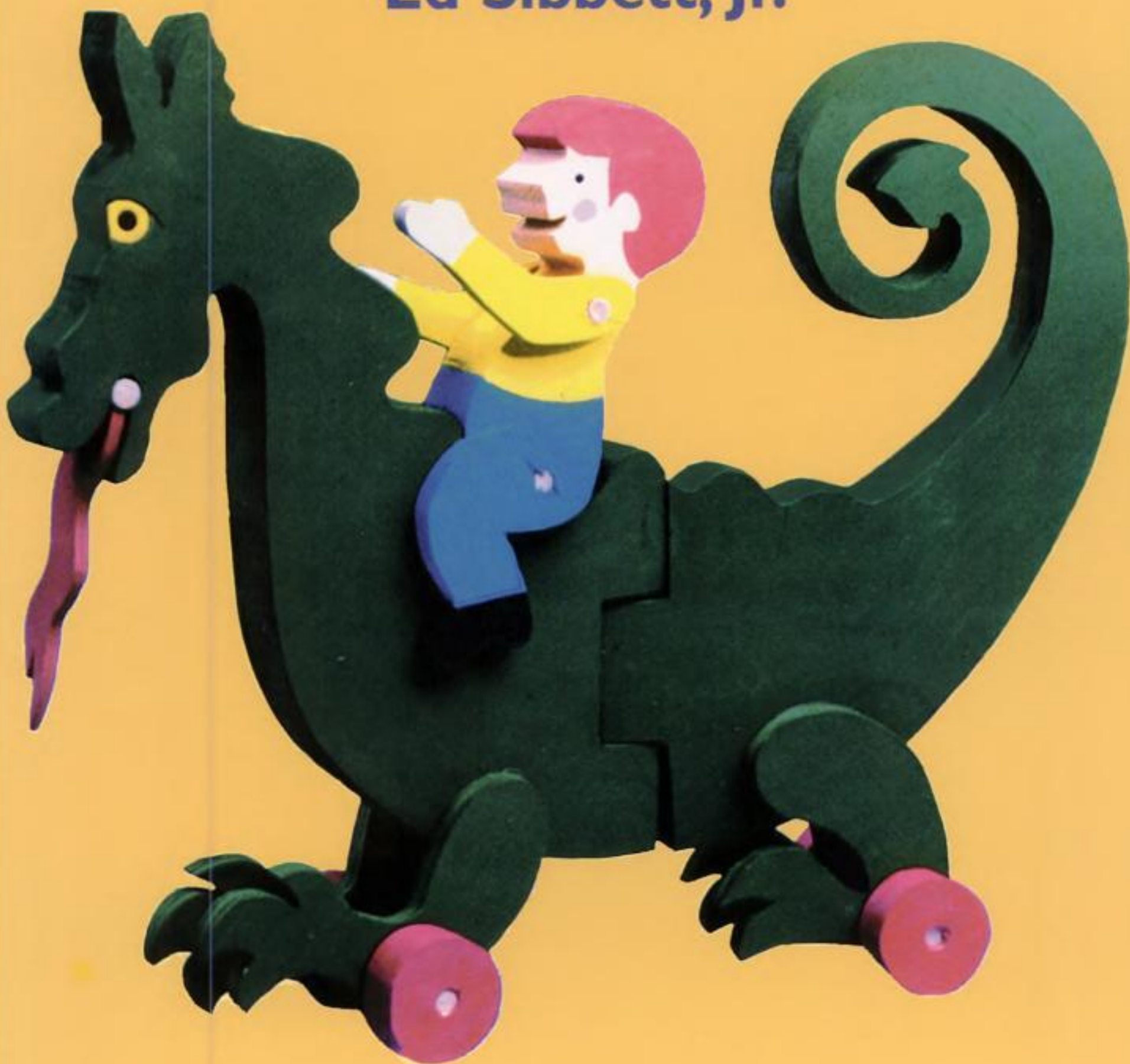


EASY-TO-MAKE ARTICULATED WOODEN TOYS

Patterns and Instructions
for 18 Playthings That Move

Ed Sibbett, Jr.



WILD HORSE

(The transfer patterns for this toy are printed on Plate 2.)

5 pattern pieces, 2 pieces of heavy wire, 3 pieces of string.

PATTERN KEY

A. horse, $\frac{3}{4}$ "

B, C, D, E. wheels, $\frac{1}{2}$ "

Two $\frac{3}{16}$ " dowels of $1\frac{3}{4}$ " length for wheels.

Dots indicate $\frac{3}{16}$ " holes to be drilled in wheels and $\frac{1}{4}$ " holes in horse.

1. Transfer the patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Trace paint lines onto opposite side of horse.
4. Cut dowels.
5. Drill holes where indicated by dots.
6. Sand rough edges on wood pieces.
7. Paint all wood pattern pieces.
8. Attach wheels to horse by inserting dowels.



ROCKING HORSE WITH HONEY BEAR

(The transfer patterns for this toy are printed on Plate 3.)

8 pattern pieces, 6 dowels.

PATTERN KEY

A. honey bear, $\frac{3}{4}$ "

B. rocking horse, $\frac{3}{4}$ "

C, D. rockers, $\frac{1}{2}$ "

E, F. arms, $\frac{1}{4}$ "

G, H. legs, $\frac{1}{4}$ "

Two $\frac{3}{16}$ " dowels of $1\frac{1}{4}$ " length for arms and legs of bear; two $\frac{3}{16}$ " dowels of $1\frac{1}{2}$ " length for crossbars in neck and body of horse; two $\frac{3}{16}$ " dowels of $1\frac{3}{4}$ " length for rockers.

Dots indicate $\frac{3}{16}$ " holes to be drilled in bear, horse and rockers and $\frac{1}{4}$ " holes in horse's feet.

1. Transfer the patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Trace paint lines onto opposite side of horse.
4. Cut dowels.
5. Drill holes where indicated by dots.
6. Sand rough edges on wood pieces.
7. Paint all wood pattern pieces.
8. Assemble rocking horse and honey bear by inserting dowels in appropriate holes.

CIRCUS WAGON

(The transfer patterns for this toy are printed on Plate 4.)

11 pattern pieces, 22 dowels.

PATTERN KEY

All pieces on $\frac{1}{2}$ " wood.

A. wagon base

B, C. wheel
supports

D, E. wagon tops (long
sides)

F, G. wagon tops (short
sides)

H, I, J, K. wheels

Two $\frac{3}{16}$ " dowels of $5\frac{1}{2}$ " length for wheels; twenty $\frac{1}{4}$ " dowels of $4\frac{1}{2}$ " length to connect base and tops of wagon.

Dashed lines indicate $\frac{1}{4}$ " holes to be drilled in side surface of wheel supports and wagon tops.

Dots indicate $\frac{1}{4}$ " holes to be drilled in wagon base and wagon tops, and $\frac{3}{16}$ " holes in wheels.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Cut dowels.
4. Drill holes where indicated by dots and dashed lines.
5. Sand rough edges on wood pieces.
6. Paint all wood pattern pieces.
7. Glue wheel supports under long sides of wagon base. The ends of the supports should be $\frac{1}{2}$ " from the ends of the wagon base. The holes in the supports on both sides should align so that dowel axles fit properly.
8. Glue the twenty shorter dowels into wagon base.
9. Glue the four wagon top pieces on top of dowels.
10. Attach wheels with remaining two dowels.
11. Attach screw eye to wagon base if you wish to pull the toy by a string.



CIRCUS ANIMALS

(The transfer patterns for these toys are printed on Plate 5.)

3 pattern pieces.

PATTERN KEY

All pieces on $\frac{3}{4}$ " wood.

A. giraffe

B. elephant

C. lion

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Sand rough edges on wood pieces.
4. Paint all wood pattern pieces. Paint eyes on animals.

ROLLING CLOWN

(The transfer patterns for this toy are printed on Plate 6.)

5 pattern pieces, 6 dowels.

PATTERN KEY

All pieces on $\frac{1}{2}$ " wood.

A. rolling clown

B, C. roll bar rails

D, E. feet of rack

One $\frac{1}{4}$ " dowel of $6\frac{1}{2}$ " length to connect feet of rack; four $\frac{1}{4}$ " dowels of 4" length to connect rails to feet; one $\frac{1}{4}$ " dowel of $2\frac{1}{2}$ " length for clown's roller.

Dashed lines indicate $\frac{1}{4}$ " holes to be drilled in side surface of rack feet and rollers.
Dots indicate $\frac{1}{4}$ " holes to be drilled in clown and feet of rack.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Trace paint lines onto opposite side of clown.
4. Cut dowels.
5. Drill holes where indicated by dashed lines and dots.
6. Sand rough edges on wood pieces. The curves in the rails should be smooth and even to make clown roll properly.
7. Paint all wood pattern pieces.
8. Place short dowel through clown's hands.
9. Assemble rolling rack by gluing dowels into rails and feet of rack in appropriate places. Small knobs glued on the ends of rails will keep clown from rolling off.



BALANCE BIRD

(The transfer patterns for this toy are printed on Plate 7.)

5 pattern pieces.

PATTERN KEY

All parts on $\frac{1}{4}$ " wood.

A. balance bird

B, C. right weights

D, E. left weights

Dotted line indicates position to glue weights.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Trace paint lines onto opposite side of balance bird.
4. Sand rough edges on all pieces.
5. Paint all wood pattern pieces.
6. Glue weights to indicated position on tail of bird, two on right side and two on left.

BALANCING ACROBATS

(The transfer patterns for this toy are printed on Plate 8.)

10 pattern pieces, 5 dowels.

PATTERN KEY

A. top acrobat, $\frac{3}{4}$ "

B. bottom acrobat's
middle section, $\frac{3}{4}$ "

C, D. bottom acrobat's
outside sections, $\frac{3}{32}$ "

E. acrobats' platform, $\frac{1}{2}$ "

F. balancing peg, $\frac{1}{2}$ "

G, H, I, J. wheels, $\frac{1}{4}$ "

Two $\frac{3}{16}$ " dowels of $3\frac{1}{2}$ " length for platform; two $\frac{3}{16}$ " dowels of $1\frac{1}{4}$ " length—one for the nose hole in the face of the top acrobat and one for the nose holes in the faces of bottom acrobat and the hole in the lump on the top acrobat's head; one $\frac{3}{16}$ " dowel of 1" length for peg and lower holes in bottom acrobat.

Dashed lines indicate $\frac{1}{4}$ " holes to be drilled in side surface of platform.

Dots indicate $\frac{3}{16}$ " holes to be drilled in peg, wheels and acrobats' bodies.

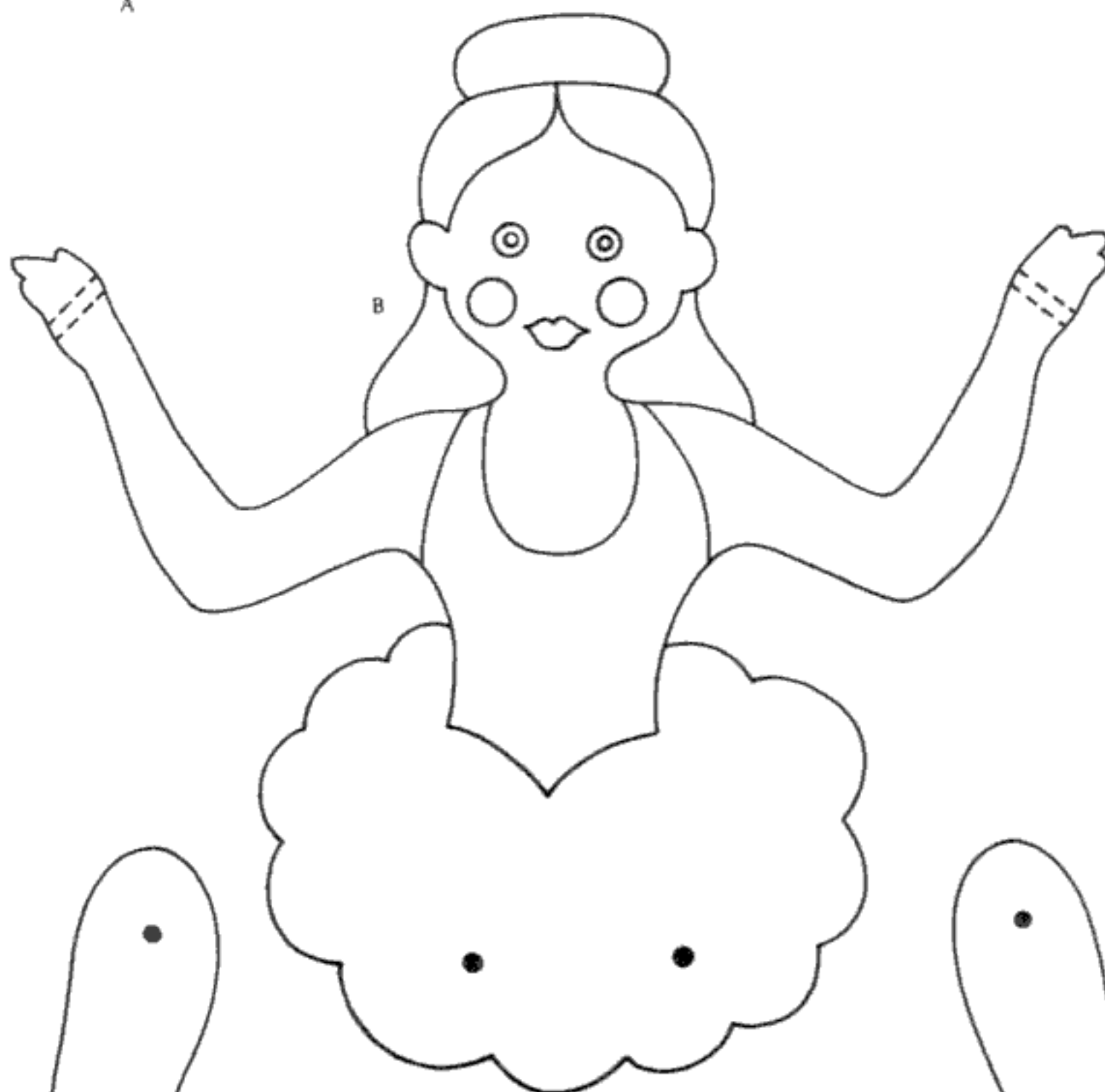
Dotted lines indicate position for gluing peg.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces.
3. Trace paint lines onto opposite side of top acrobat. You may also wish to trace the few paint lines on the bottom acrobat's middle section.
4. Cut dowels.
5. Drill holes where indicated by dashed lines and dots.
6. Sand rough edges on wood pieces.
7. Paint all wood pattern pieces.
8. Glue one bottom acrobat outside section to each side of middle section. Use a clamp to hold three pieces together. Make sure that the dowel holes are aligned.
9. Sand edges on bottom acrobat again.
10. Glue balancing peg to acrobats' platform, hole up.
11. Assemble toy by placing dowels in appropriate holes (the hole in the lump on the top acrobat's head should be aligned between nose holes on the two faces of bottom acrobat).

(Instructions continue after patterns)



A



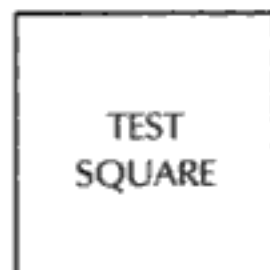
B



C

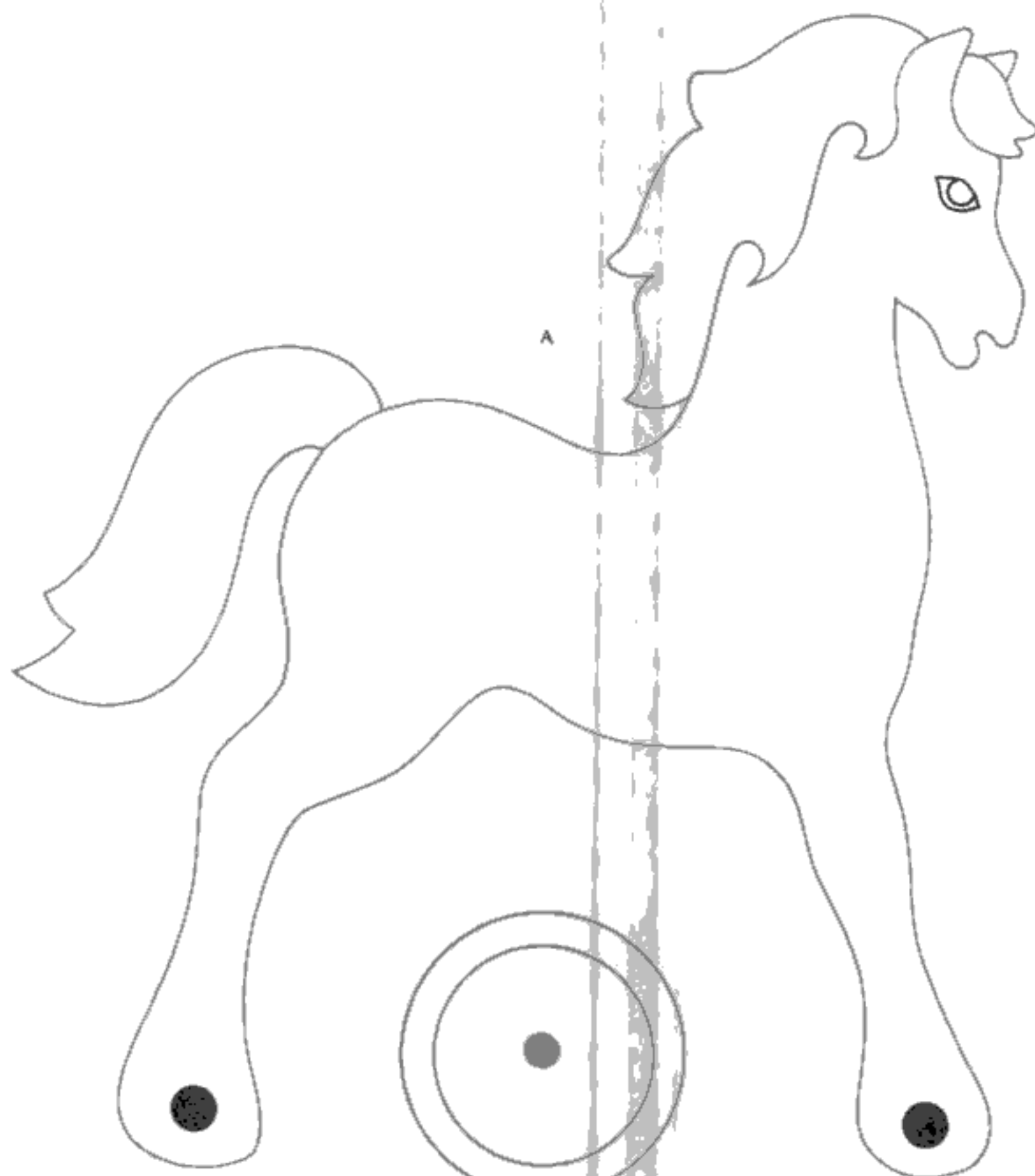


D

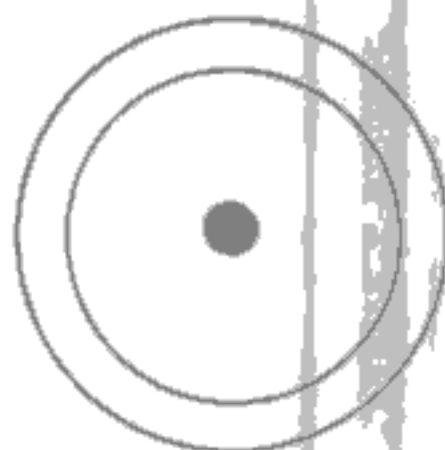


CLIMBING CIRCUS GIRL

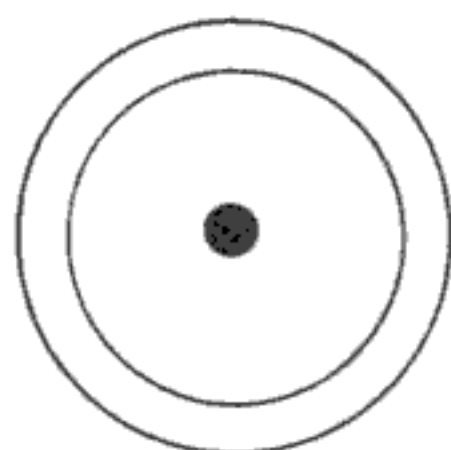
PLATE 1



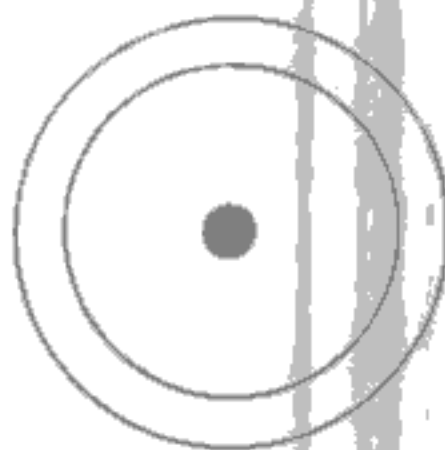
A



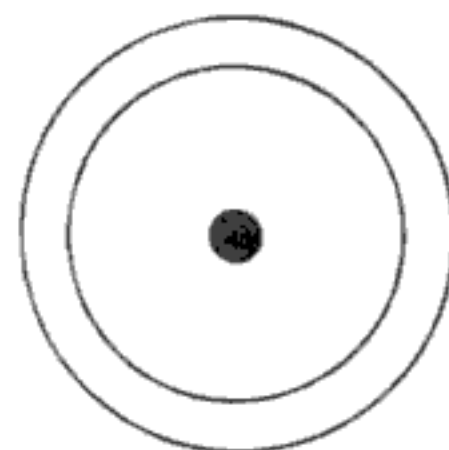
B



C



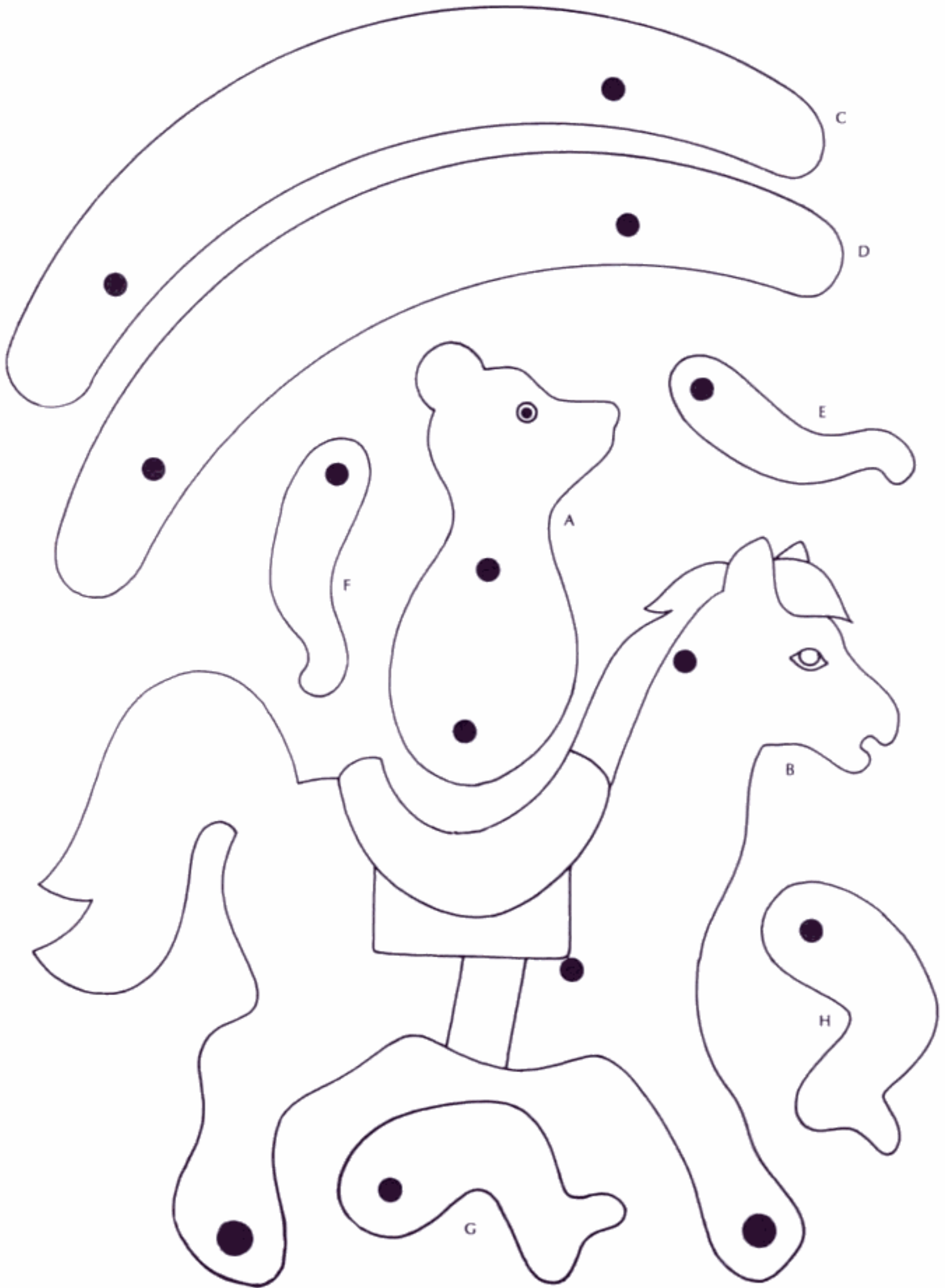
D



E

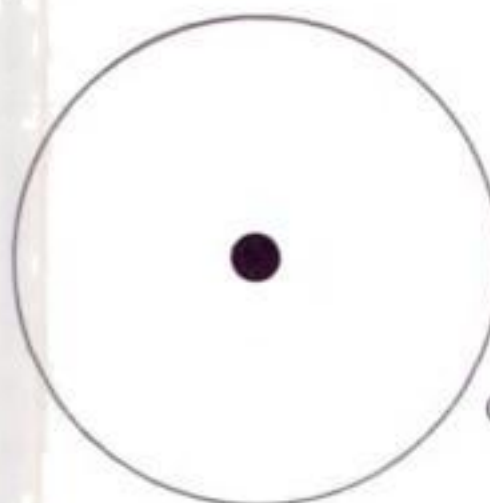
WILD HORSE

PLATE 2



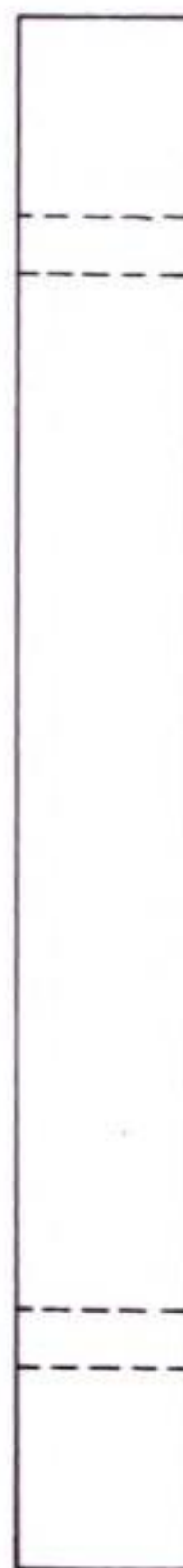
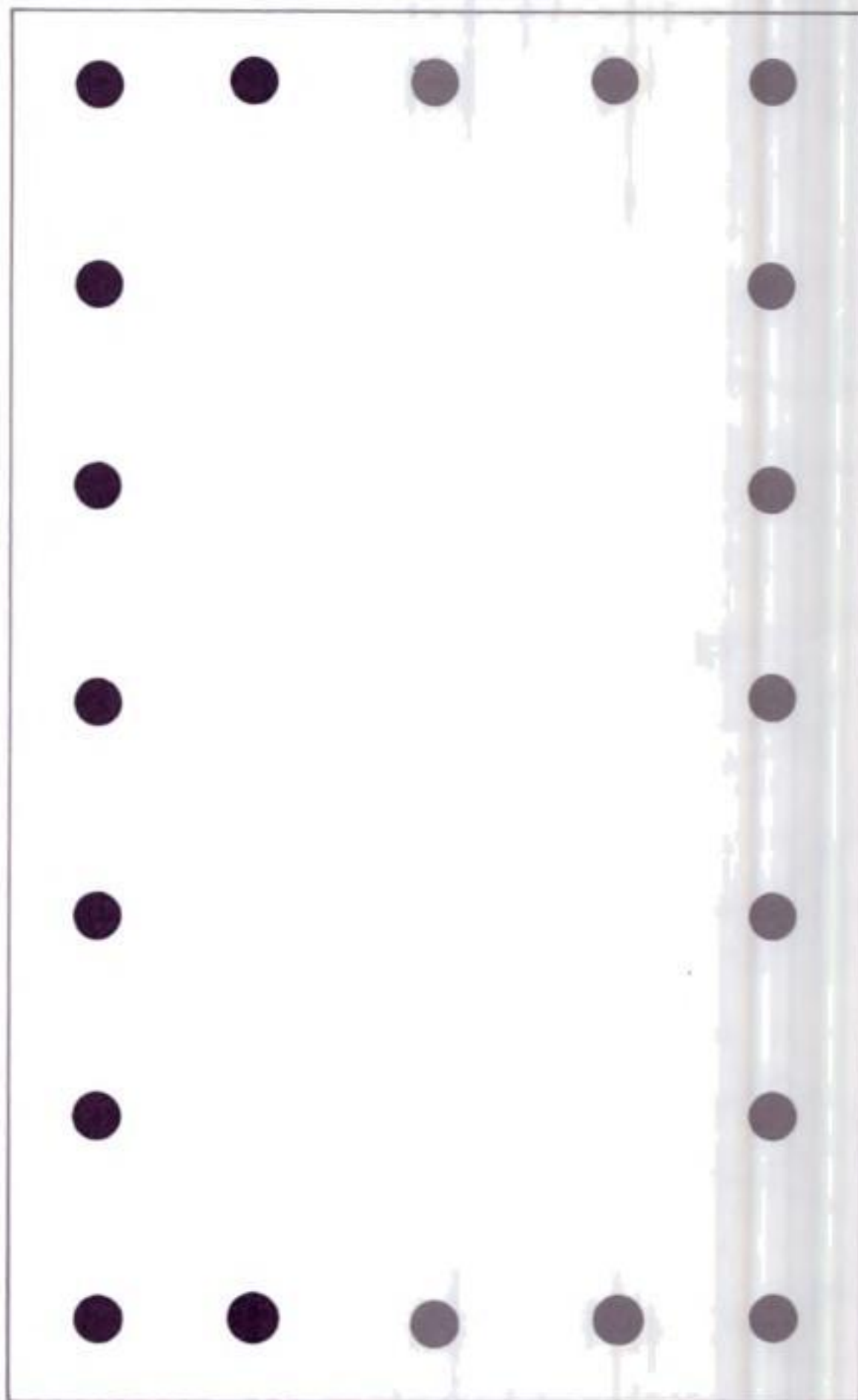
ROCKING HORSE WITH HONEY BEAR

F, G (Cut twice)

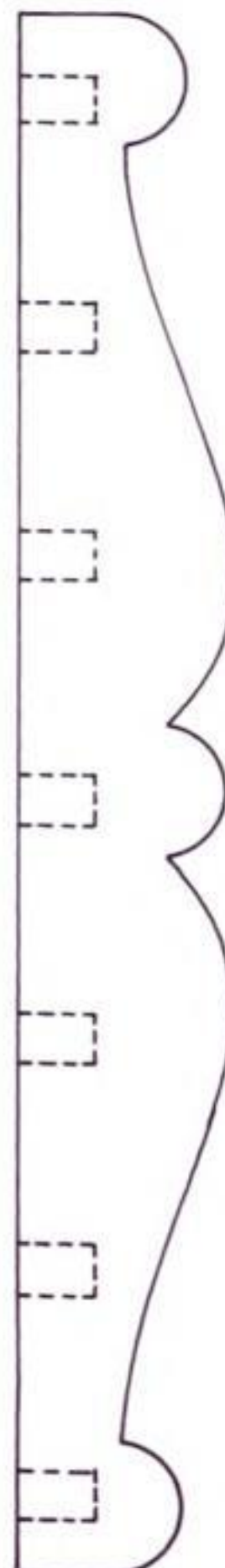


H, I, J, K
(Cut 4 times)

A



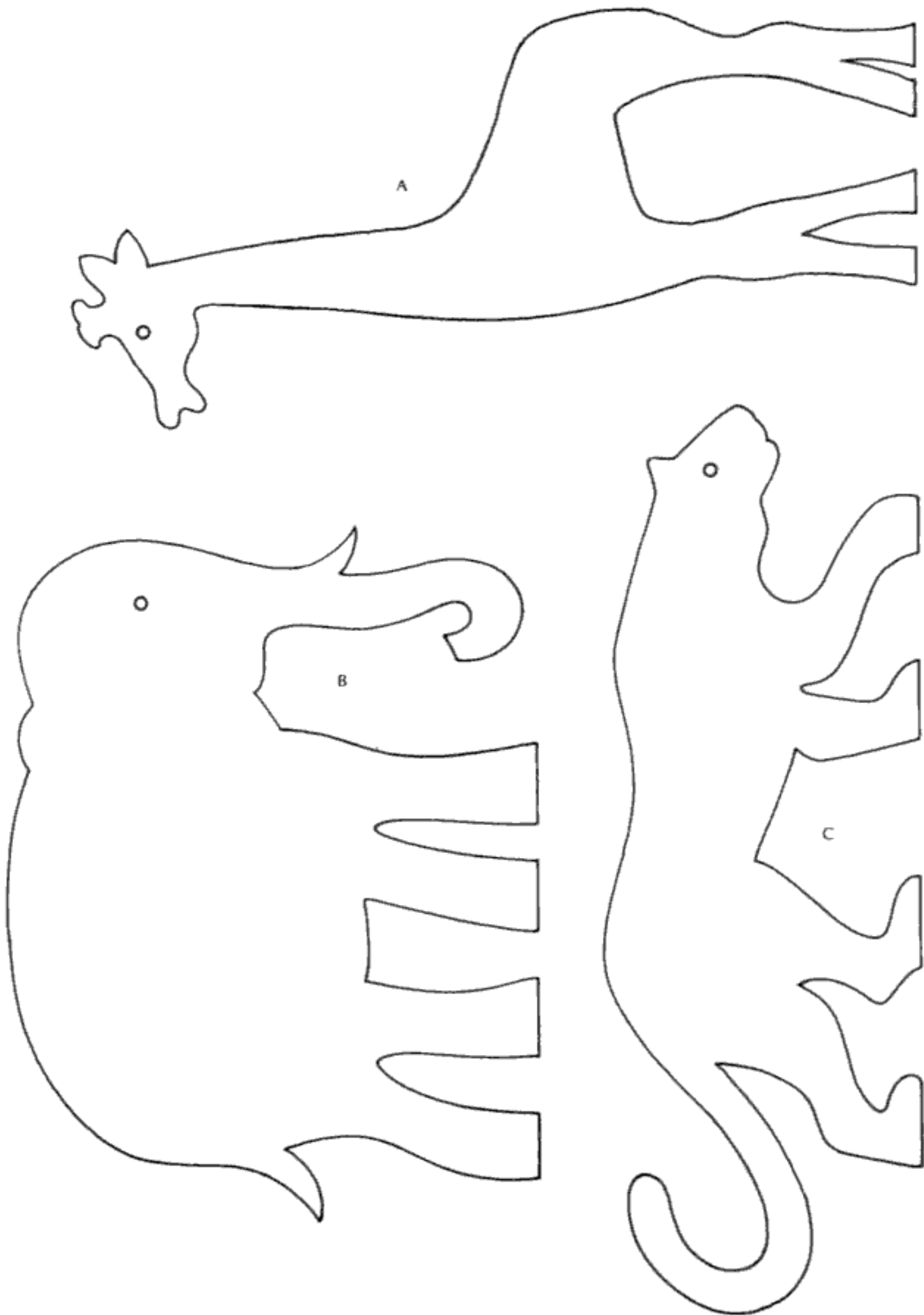
B, C (Cut twice)



D, E (Cut twice)

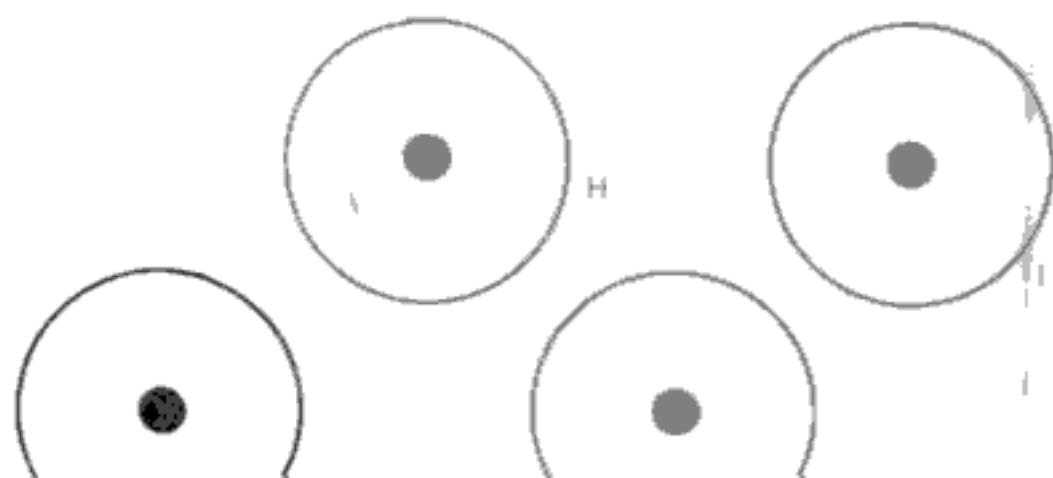
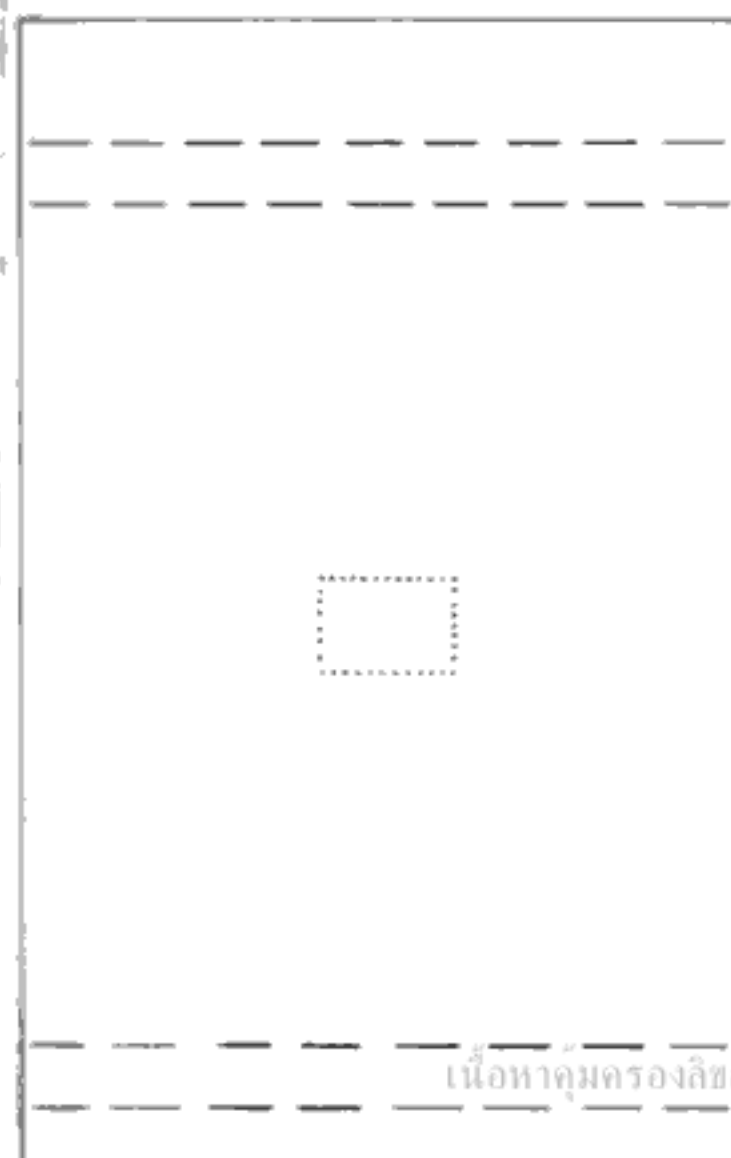
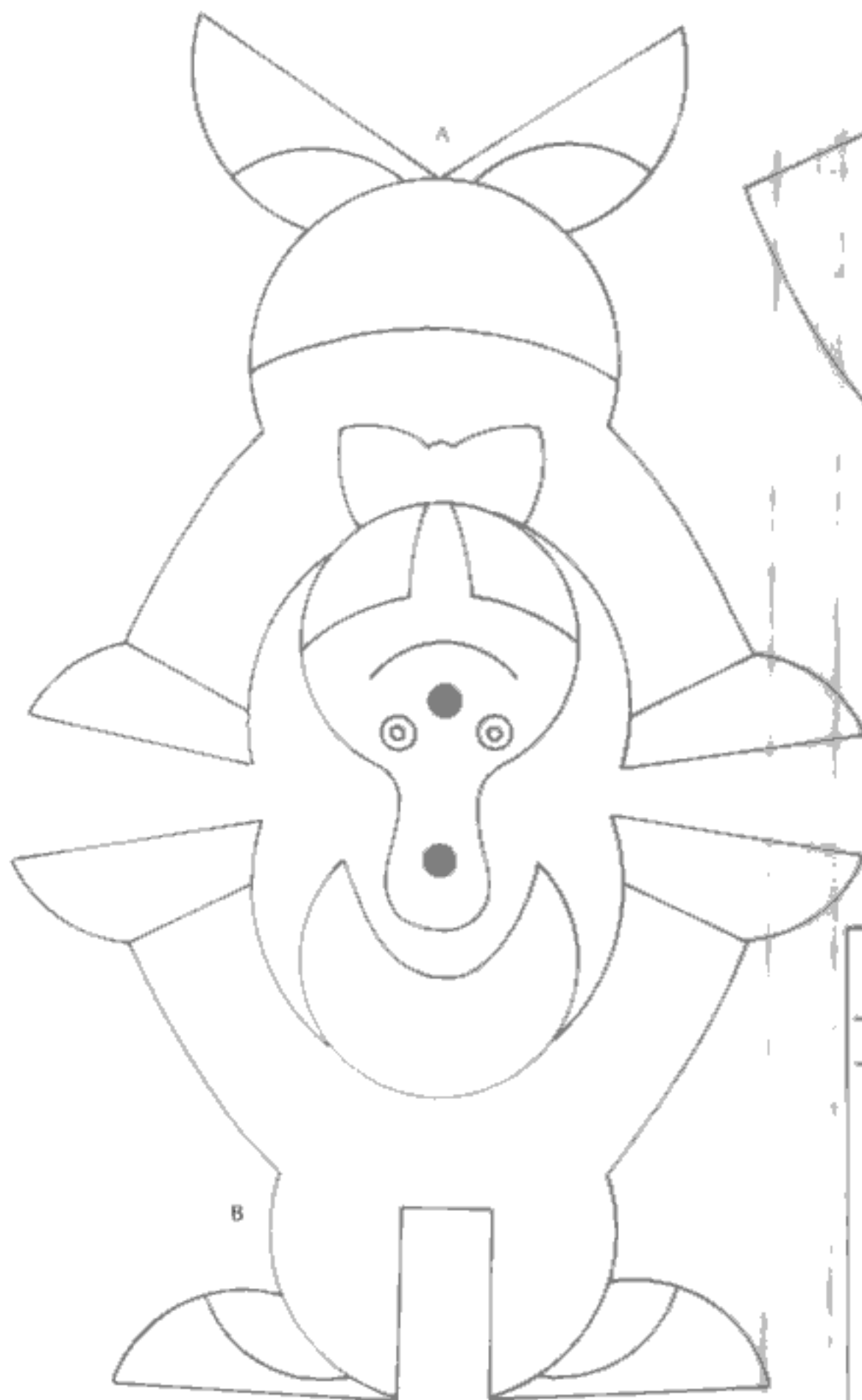
CIRCUS WAGON

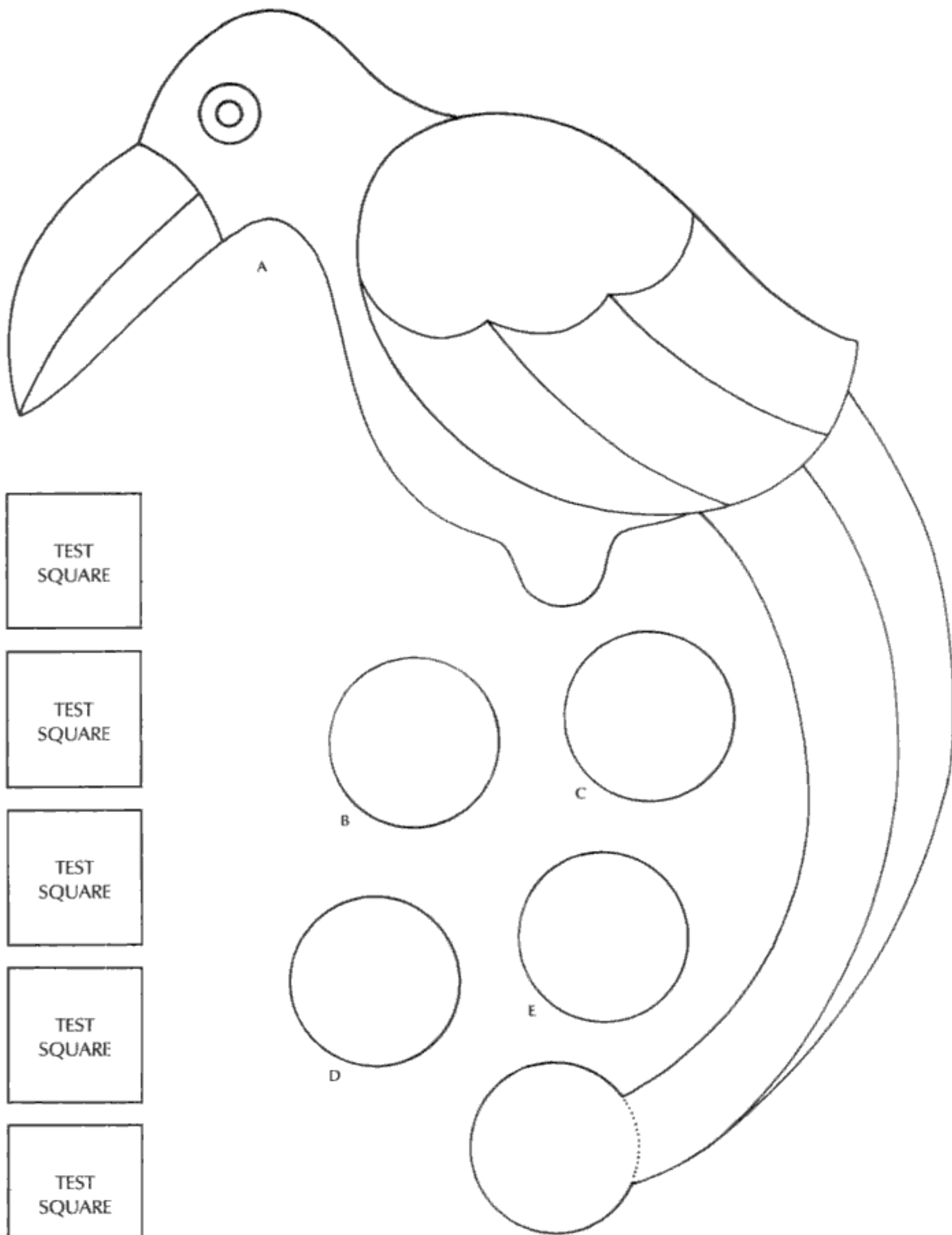
PLATE 4



CIRCUS ANIMALS

PLATE 5

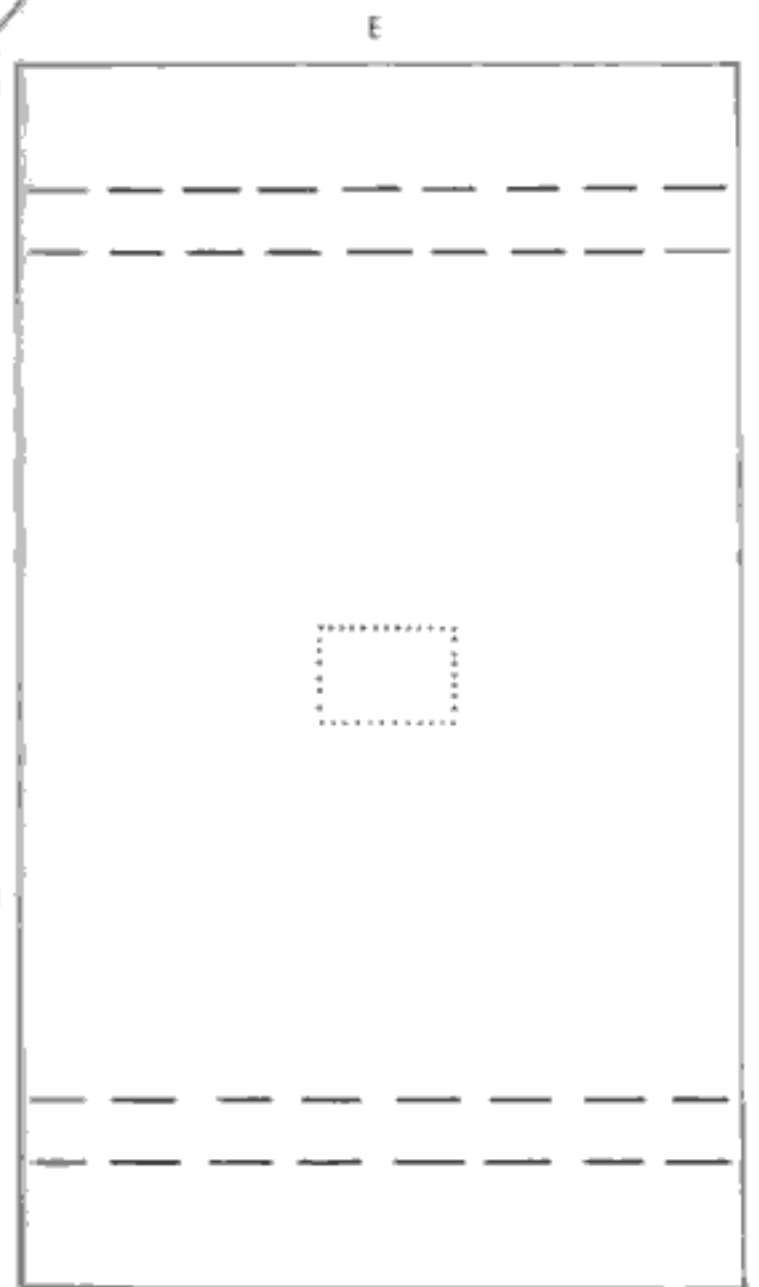
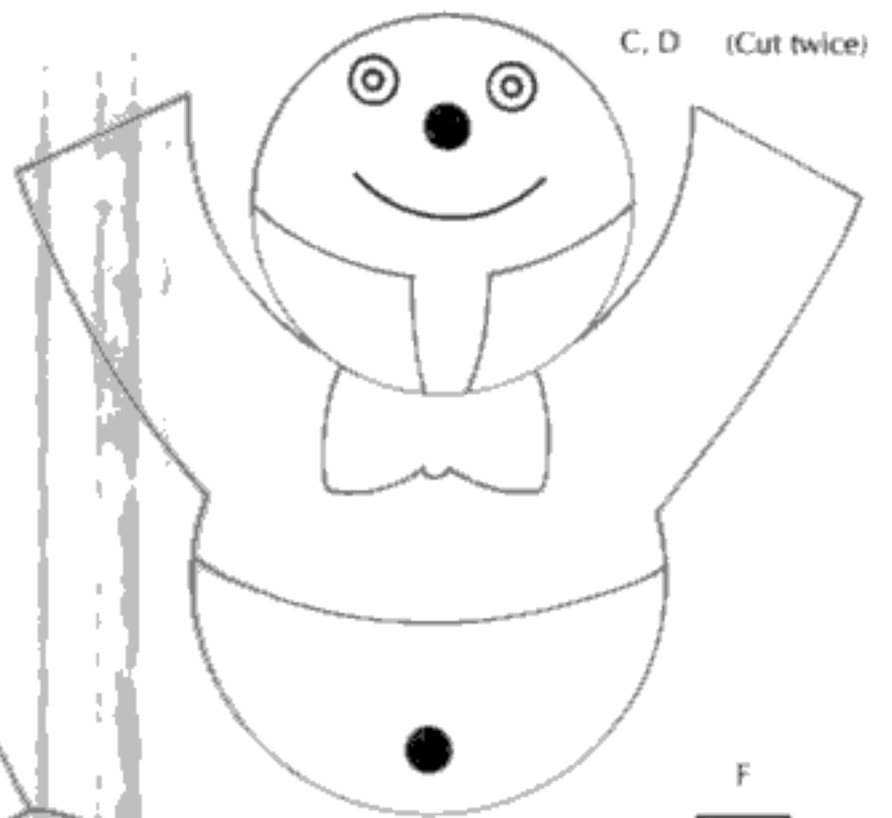
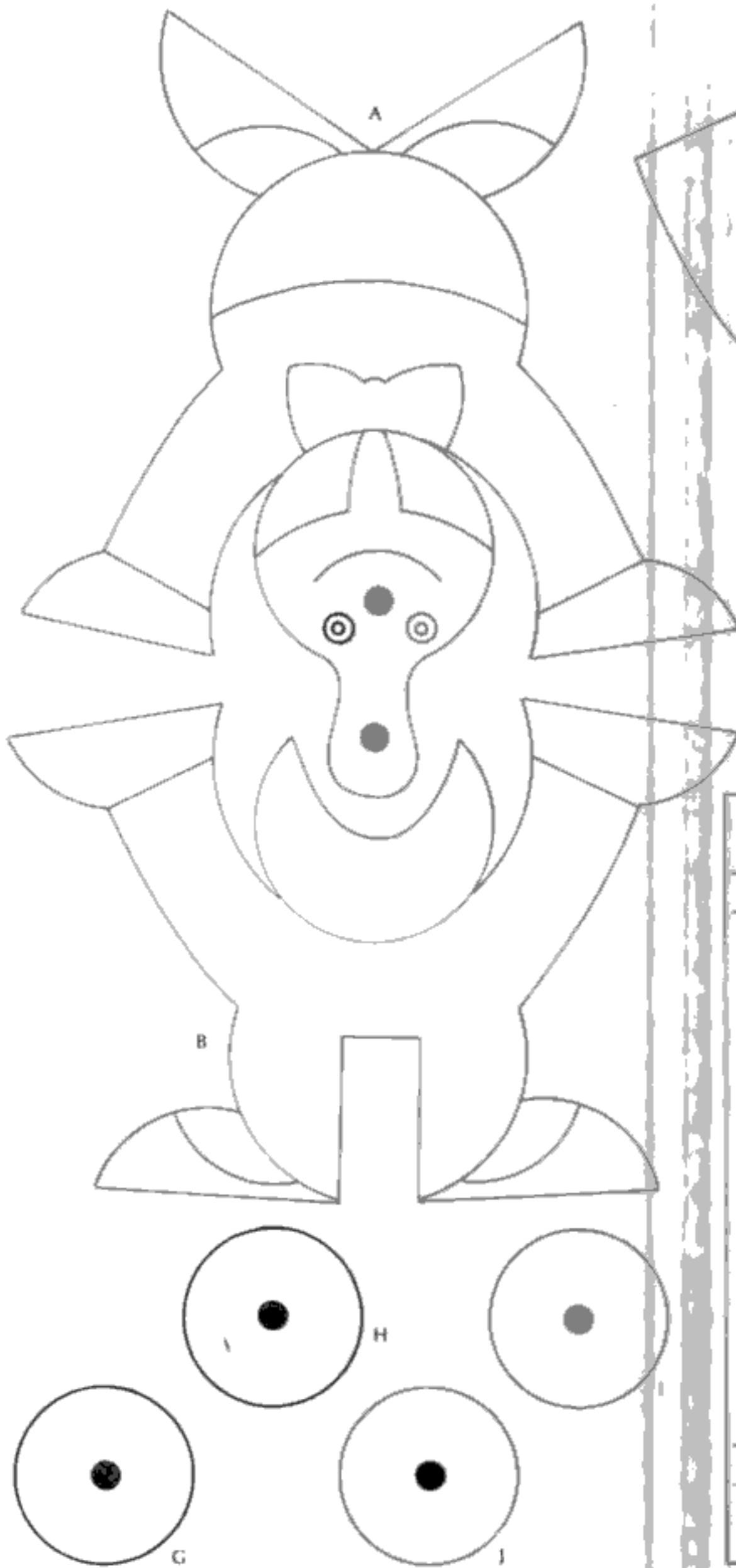




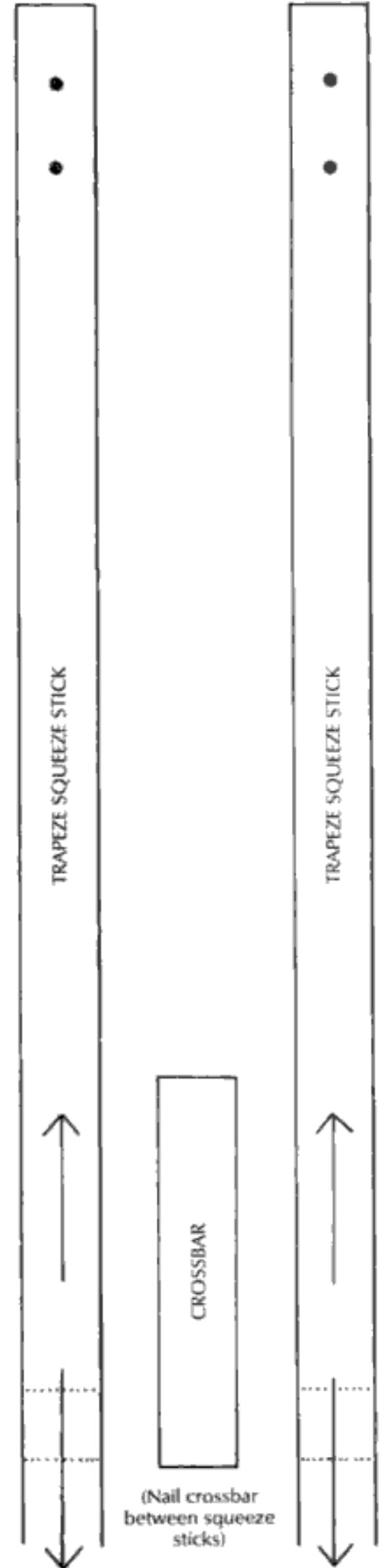
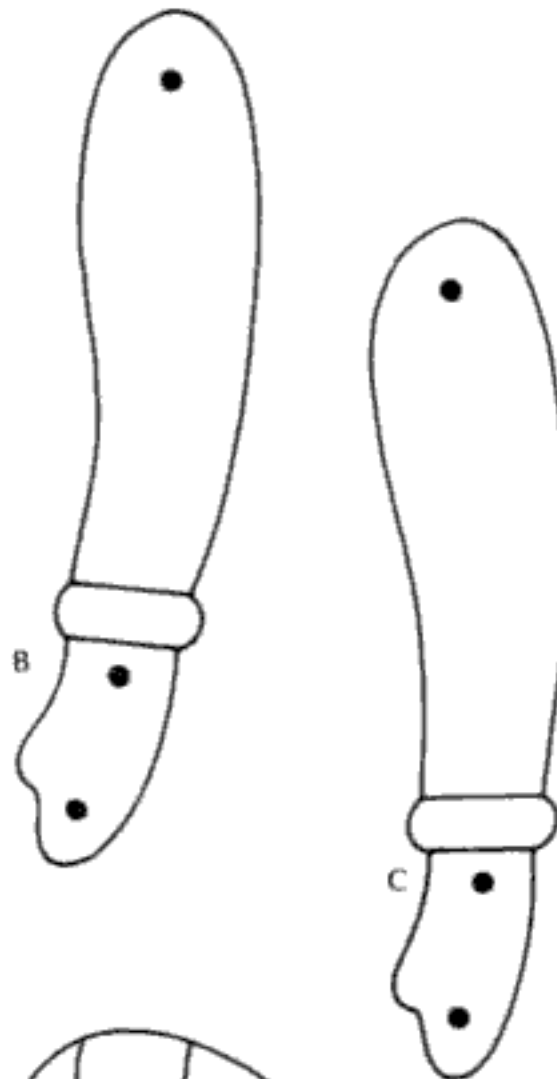
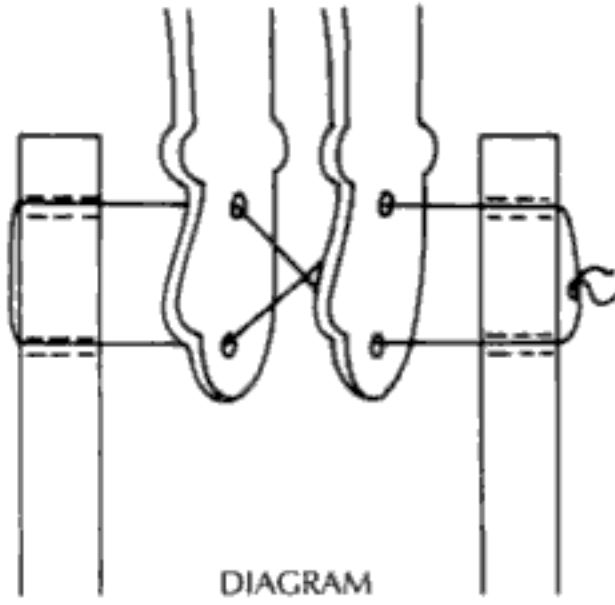
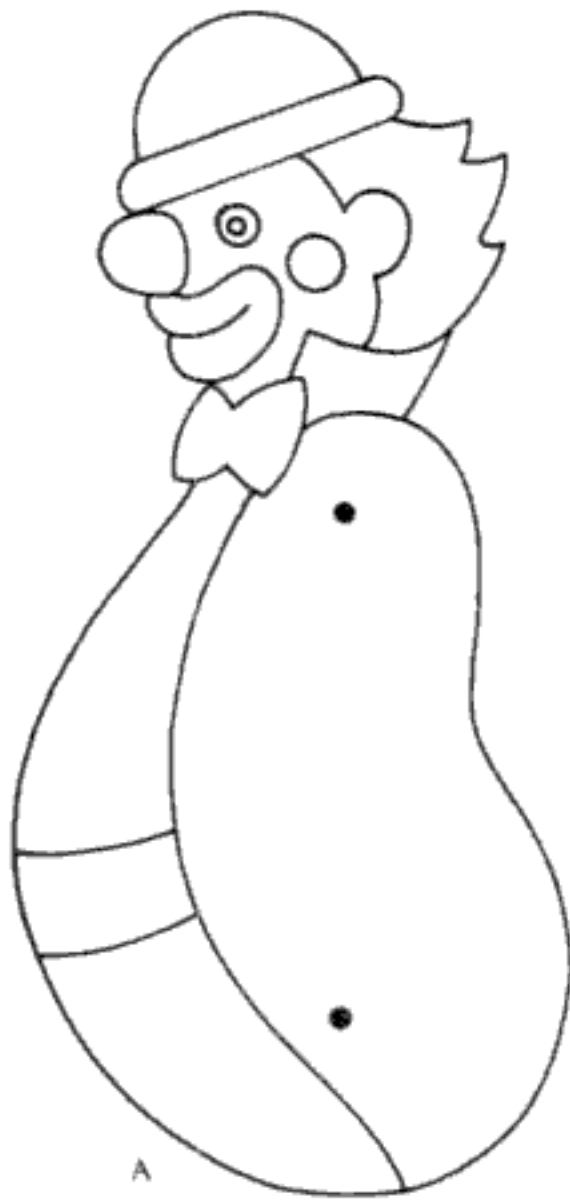
BALANCE BIRD

PLATE 7

เนื้อหาคุ้มครองลิขสิทธิ์



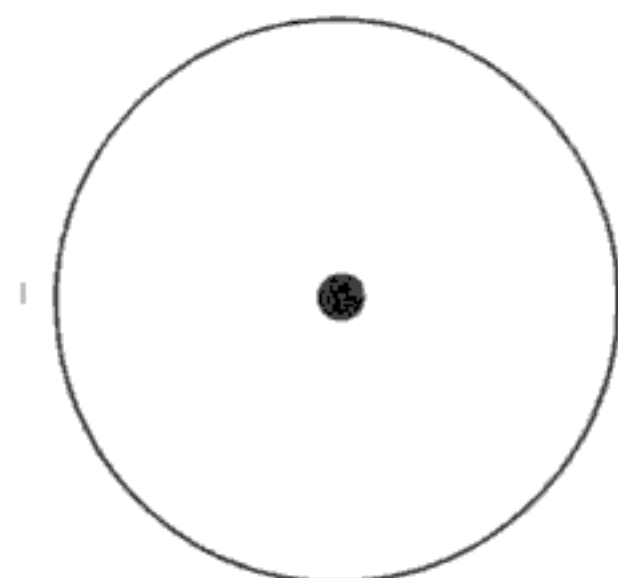
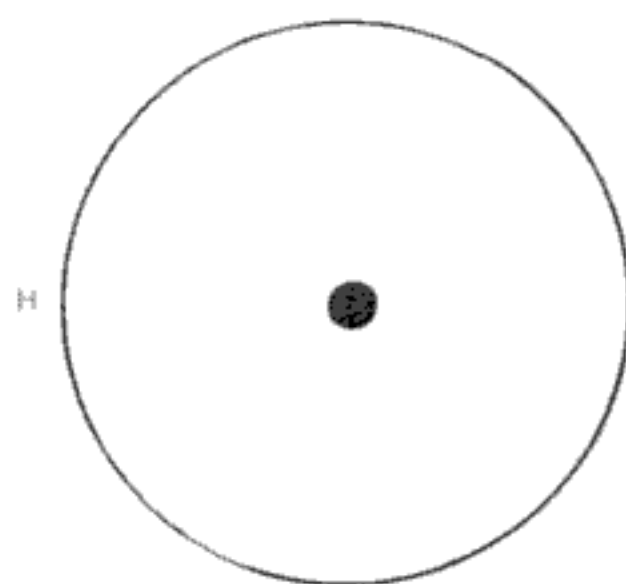
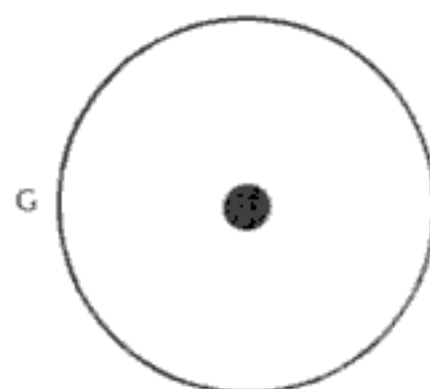
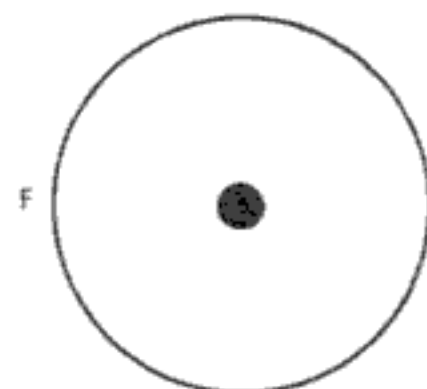
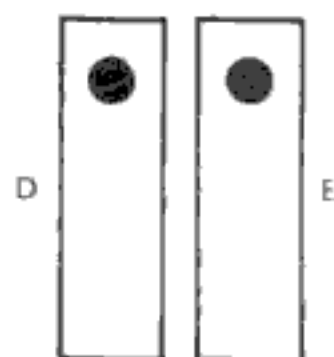
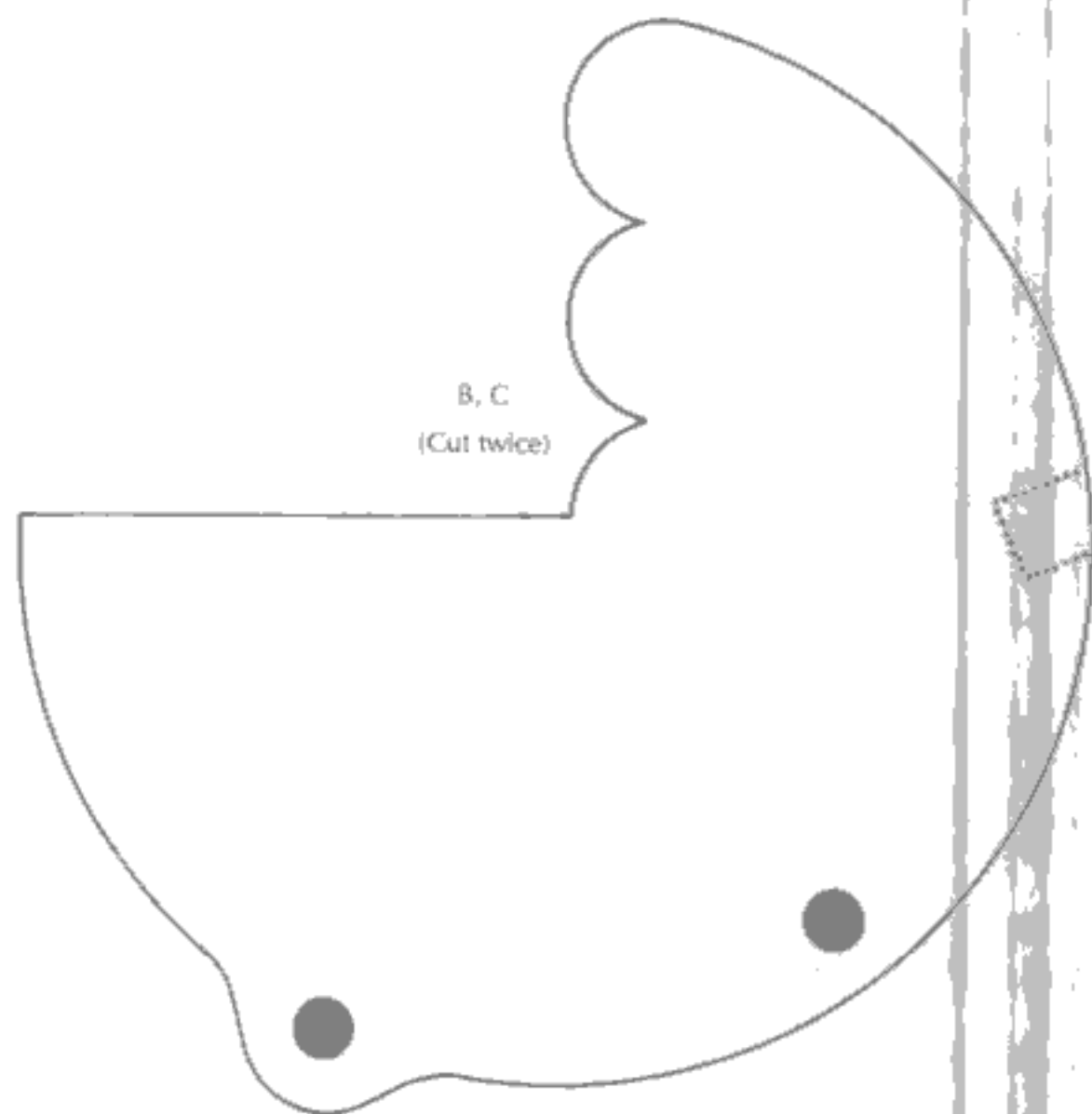
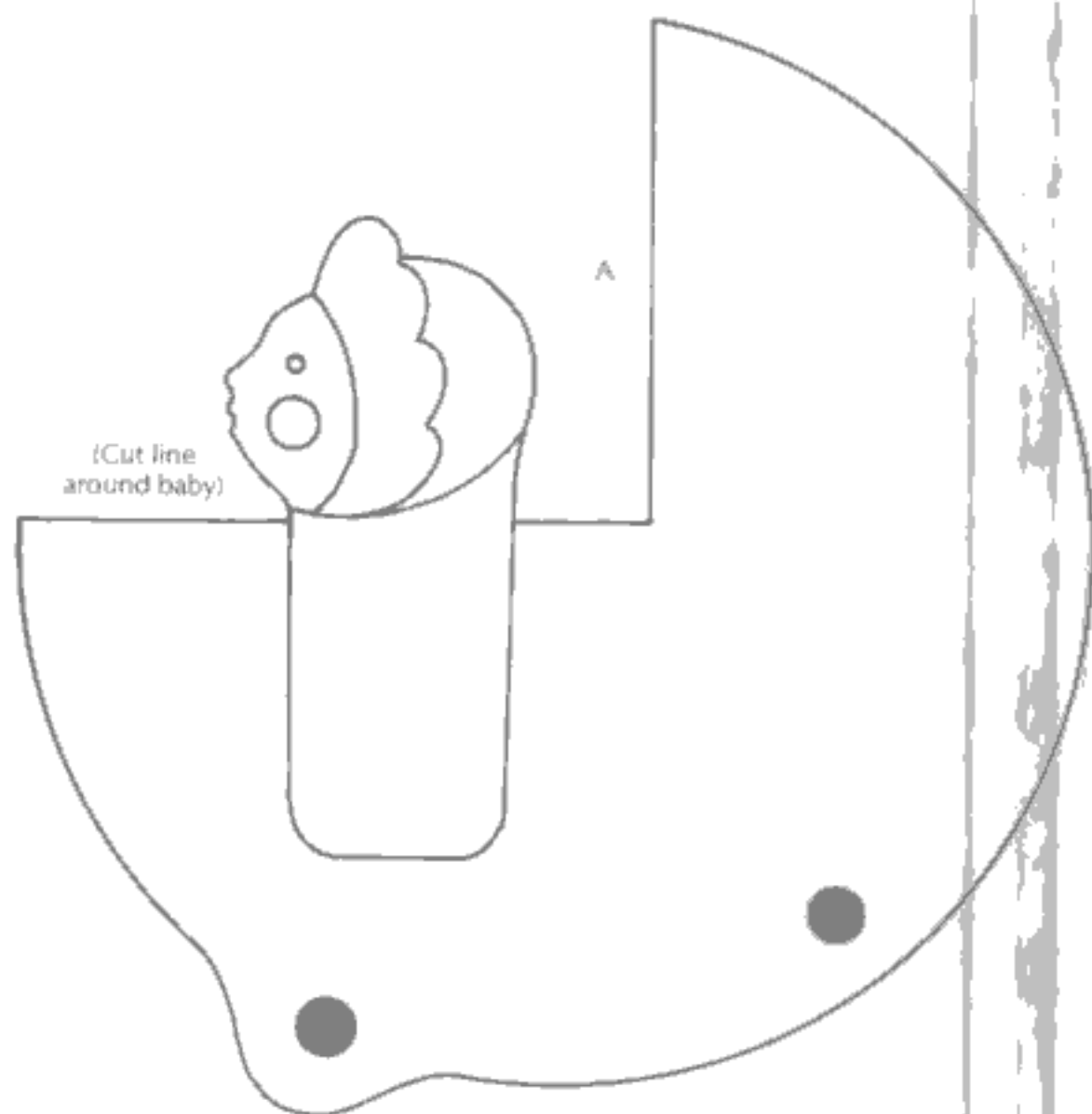
BALANCING ACROBATS



ACROBAT CLOWN

PLATE 9

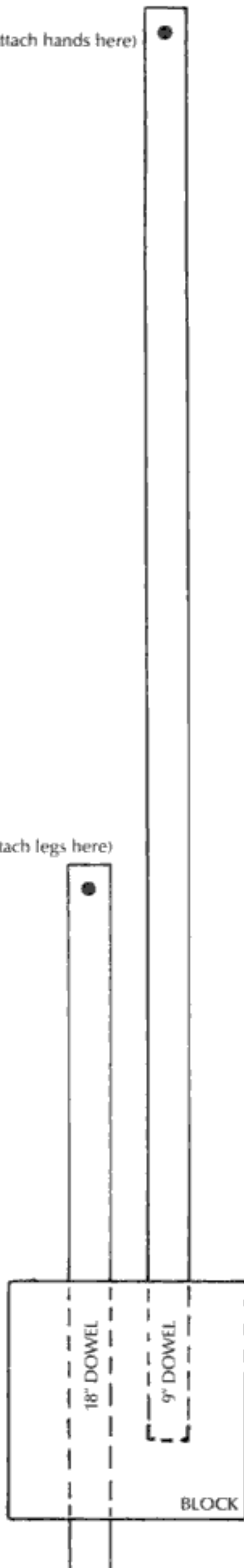




BABY BUGGY

(Attach hands here)

(Attach legs here)



D



E



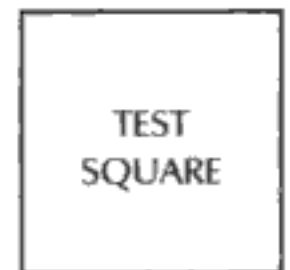
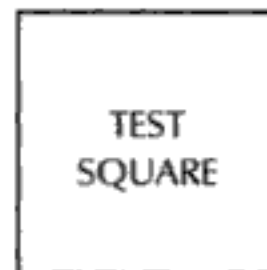
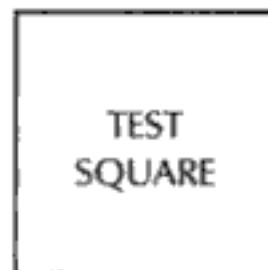
A



B

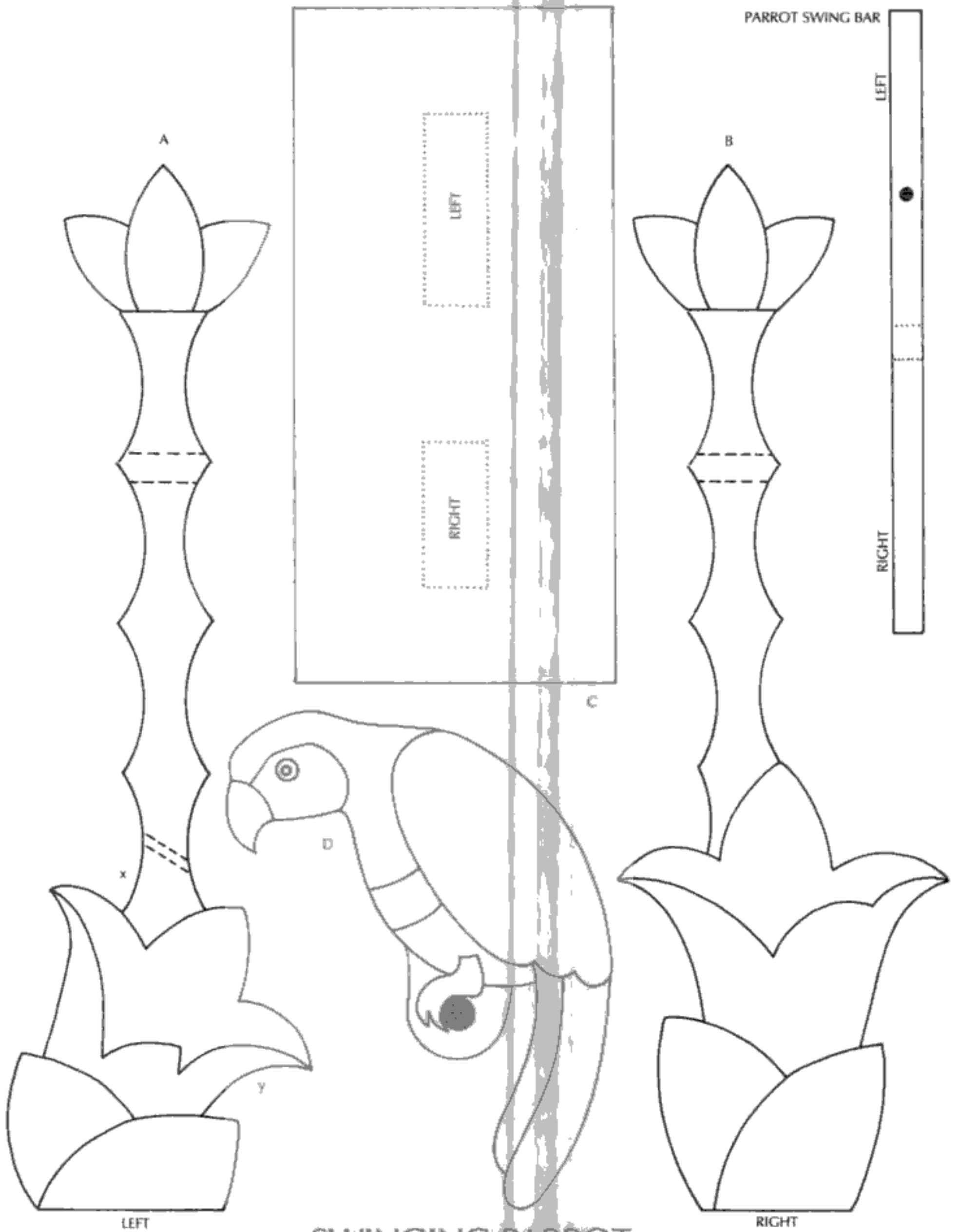


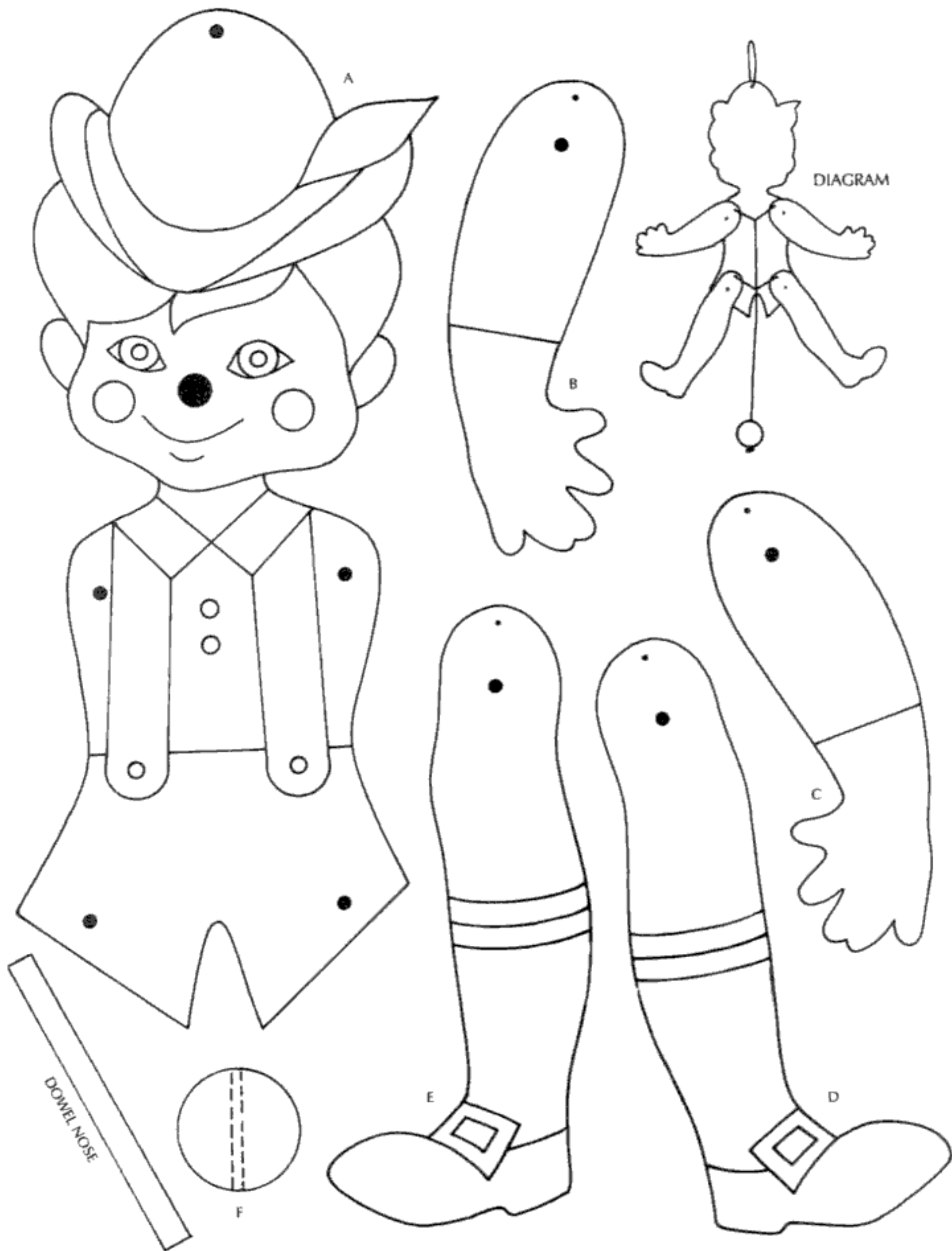
C



HARLEQUIN ACROBAT

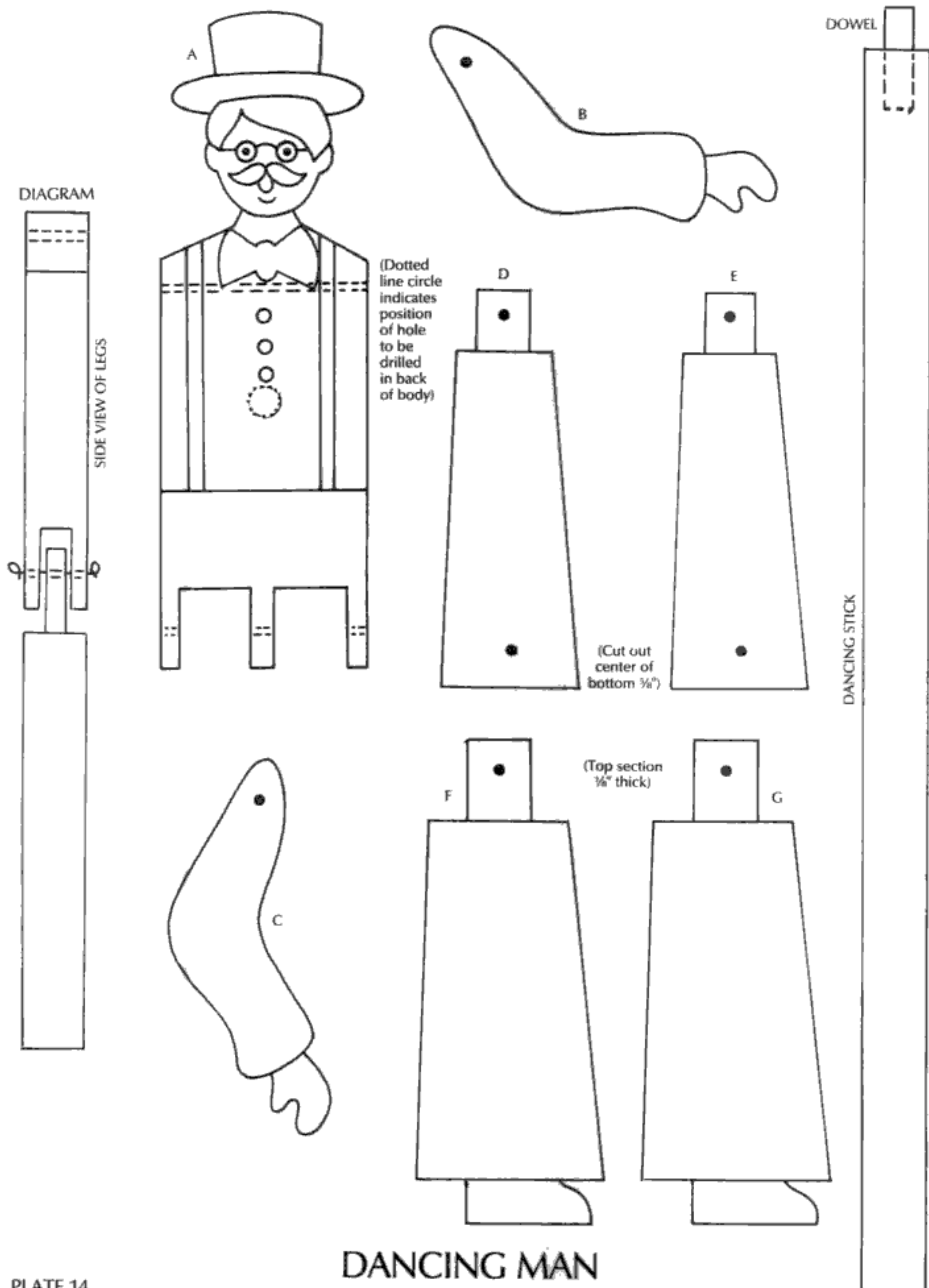
PLATE 11

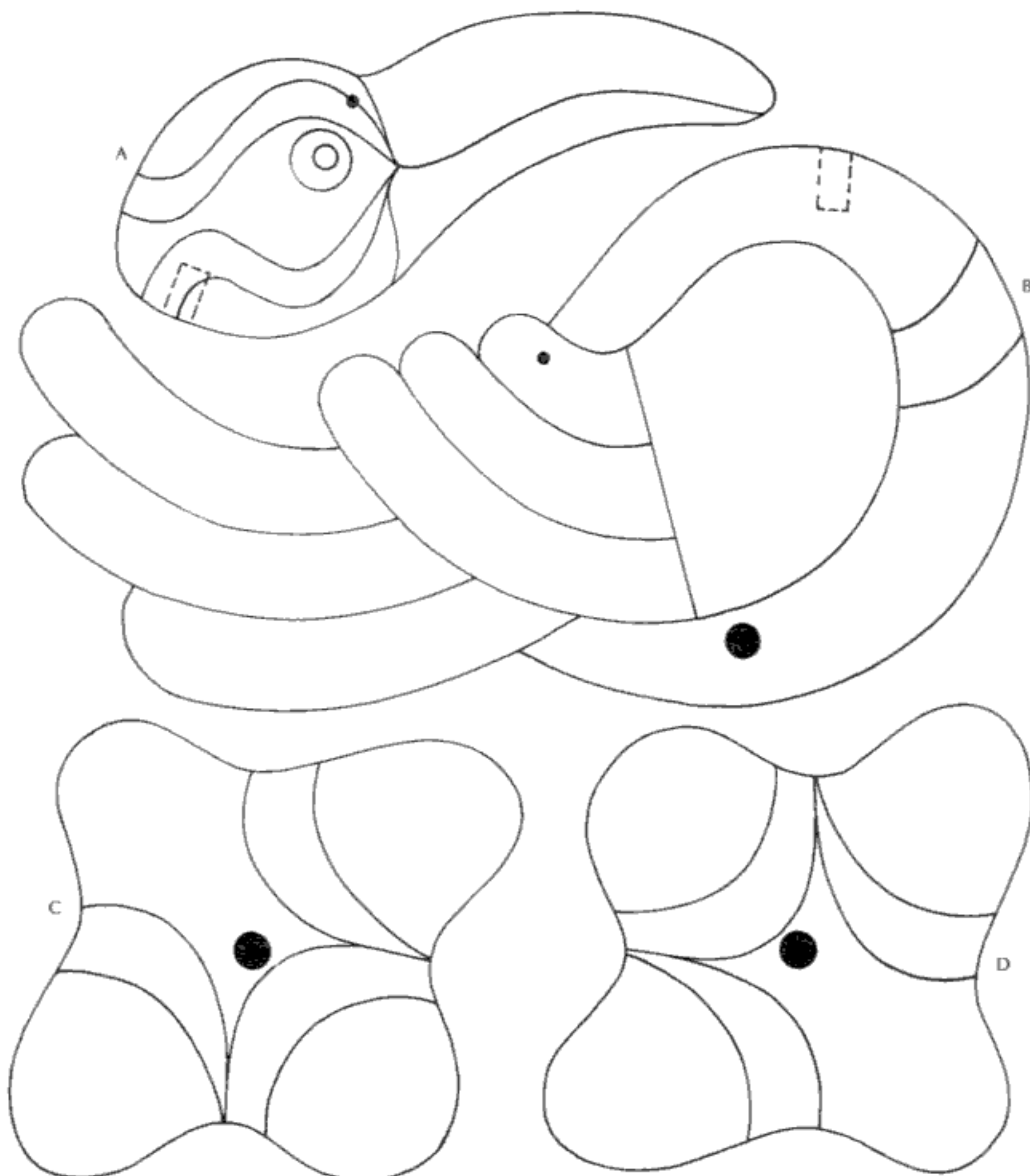
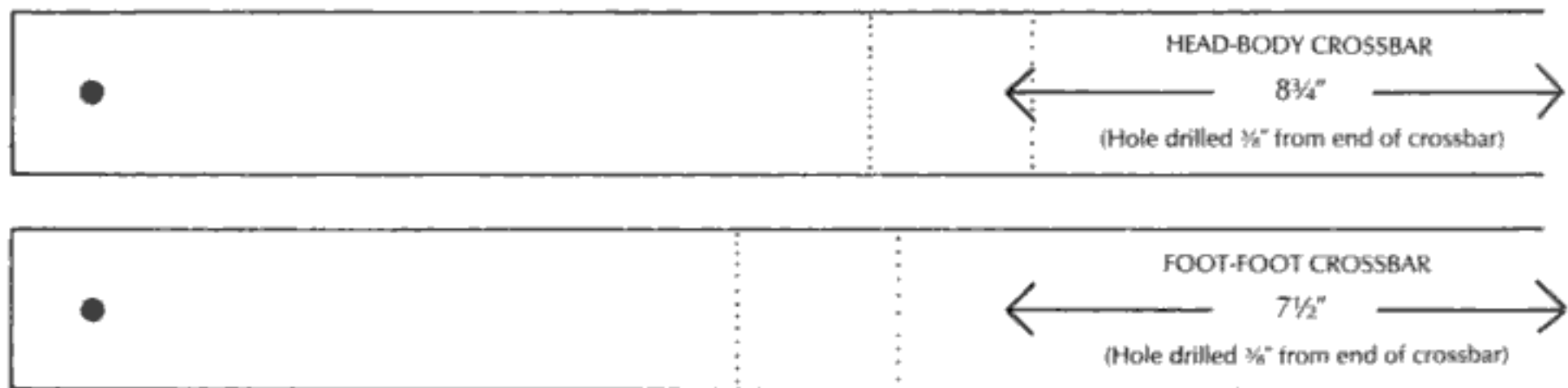




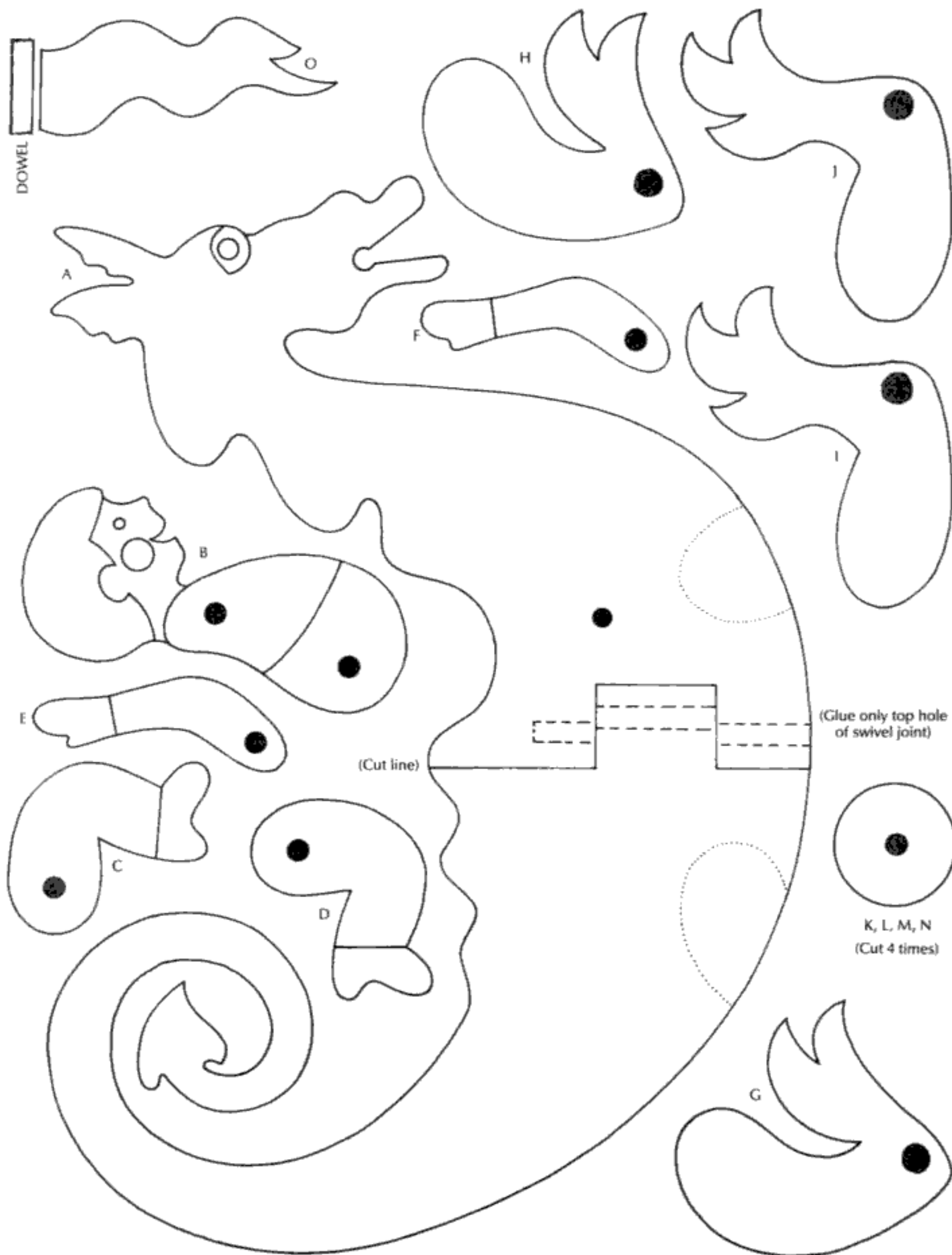
PINOCCHIO JUMPING JACK

1871





JUNGLE BIRD



BOY ON A DRAGON

ACROBAT CLOWN

(The transfer patterns for this toy are printed on Plate 9.)

Here is the acrobat clown. Squeeze the lower handles of the framework and he performs all sorts of difficult acrobatic feats of strength and agility. Squeezing the handles twists the strings, and the clown appears to tumble and swing.

5 pattern pieces, 2 sticks, a crossbar, 2 pieces of heavy wire, a piece of string, 2 small thin-gauge nails ($\frac{3}{4}$ ").

PATTERN KEY

Parts A–E on $\frac{1}{8}$ " wood, trapeze squeeze sticks and crossbar are cut from $\frac{1}{2}$ " wood.

A. clown's body

B, C. clown's arms

D, E. clown's legs

Two trapeze squeeze sticks $13" \times \frac{1}{2}" \times \frac{5}{16}"$; one crossbar $2\frac{1}{2}" \times \frac{1}{2}" \times \frac{1}{2}"$.

Dots indicate $\frac{3}{32}$ " holes to be drilled in clown pieces and through $\frac{5}{16}$ " depth on squeeze sticks.

Dotted line indicates position to nail crossbar between squeeze sticks.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces and cut sticks and crossbars of specified size.
3. Trace paint lines onto opposite sides of clown pieces.
4. Drill holes where indicated by dots.
5. Sand rough edges on wood pieces.
6. Paint all wood pattern pieces.
7. Attach arms and legs to clown body. Cut 1" piece of wire and bend one end over to form a knot. Insert other end of wire through holes in arm and body pieces and bend it into a knot. Cut second piece of wire and repeat procedure for legs.
8. Attach crossbar between squeeze sticks where marked (8" from holes-end of stick) with a nail in each side. Do not nail pieces together too tightly or you will not be able to squeeze the sticks properly.
9. Follow diagram when stringing clown to trapeze frame. Lay clown on face and place hands between squeeze sticks. Insert string through the two holes in each of the sticks and hands as shown. Tie a knot in string ends when done, leaving $\frac{3}{4}$ " of string projecting to secure knot.

BOY ON A DRAGON

(The transfer patterns for this toy are printed on Plate 16.)

15 pattern pieces, 7 dowels.

PATTERN KEY

A. dragon's body, $\frac{3}{4}$ "

B. boy's body, $\frac{3}{4}$ "

C, D. boy's legs, $\frac{1}{4}$ "

E, F. boy's arms, $\frac{1}{4}$ "

G, H. dragon's back

I, J. dragon's front

legs, $\frac{1}{4}$ "

legs, $\frac{1}{4}$ "

K, L, M, N. wheels, $\frac{1}{4}$ "

O. dragon's tongue, $\frac{1}{8}$ "

One $\frac{3}{16}$ " dowel of 2" length for swivel joint in dragon's body; two $\frac{3}{16}$ " dowels of $1\frac{3}{4}$ " length for the wheels; three $\frac{3}{16}$ " dowels of $1\frac{1}{4}$ " length for boy's arms and legs, and footrest for boy's feet (in dragon's body); one $\frac{1}{8}$ " dowel of $\frac{3}{4}$ " length for tongue dowel in dragon's mouth.

Dashed lines indicate $\frac{3}{16}$ " holes to be drilled for swivel joint in dragon's body.

Dots indicate $\frac{3}{16}$ " holes to be drilled in various parts of boy, dragon's body and wheels and $\frac{1}{4}$ " holes in dragon's legs.

Dot lines indicate position to glue dragon's legs to body.

1. Transfer all patterns onto wood of specified thickness.
2. Cut out all wood pattern pieces. The dragon's body should be cut in two as shown.
3. Trace paint and glue lines onto opposite sides of pieces where necessary.
4. Cut dowels.
5. Drill holes where indicated by dashed lines and dots. Note arrangement of the three swivel joint sections in dragon's body.
6. Sand rough edges on wood pieces.
7. Paint all wood pattern pieces.
8. Glue dragon's legs to body where indicated by dotted lines. Dowel holes should align.
9. Construct swivel joint in dragon's body. The dowel should be glued into only the upper hole section. After hole has been glued, align the holes and insert dowel from underneath.
10. Insert rest of dowels in appropriate holes.
11. Glue dragon's tongue to dowel and insert in dragon's mouth.
12. Attach screw eye to dragon if you wish to pull toy by string.

Pinocchio Jumping Jack



Acrobat Clown



Circus Wagons/Circus Animals



Climbing Circus Girl



Dancing Man

Rocking Horse with Honey Bear



Jungle Bird



Swinging Parrot



Wild Horse

EASY-TO-MAKE ARTICULATED WOODEN TOYS

Ed Sibbett, Jr.

Generations of children have delighted in articulated toys—jointed toys with moving parts that seem to have a life of their own. Now woodworkers can make some of these time-honored playthings with this easy-to-follow volume of patterns and instructions.

Each pattern is printed on inked transfer paper which can be ironed onto wood, eliminating much of the need for tracing. What's more, the patterns are reusable for making additional toys. After painting or coloring with a permanent marking pen, the toys are ready for action, fun or display on wall, shelf or desk!

Dover Original. Introduction. Instructions, diagrams and iron-on transfer patterns for 18 toys. 48pp. 8 1/4 x 11. Paperbound.

See every Dover book in print at www.doverpublications.com

\$6.95 IN USA



ISBN 0-486-24411-3



Material com direitos autorais

Sibbett Easy-to-Make Articulated Wooden Toys: Patterns and Instructions for 18 Playthings that Move Dover 0-486-24411-3

Cover design & photos by Ted Menten