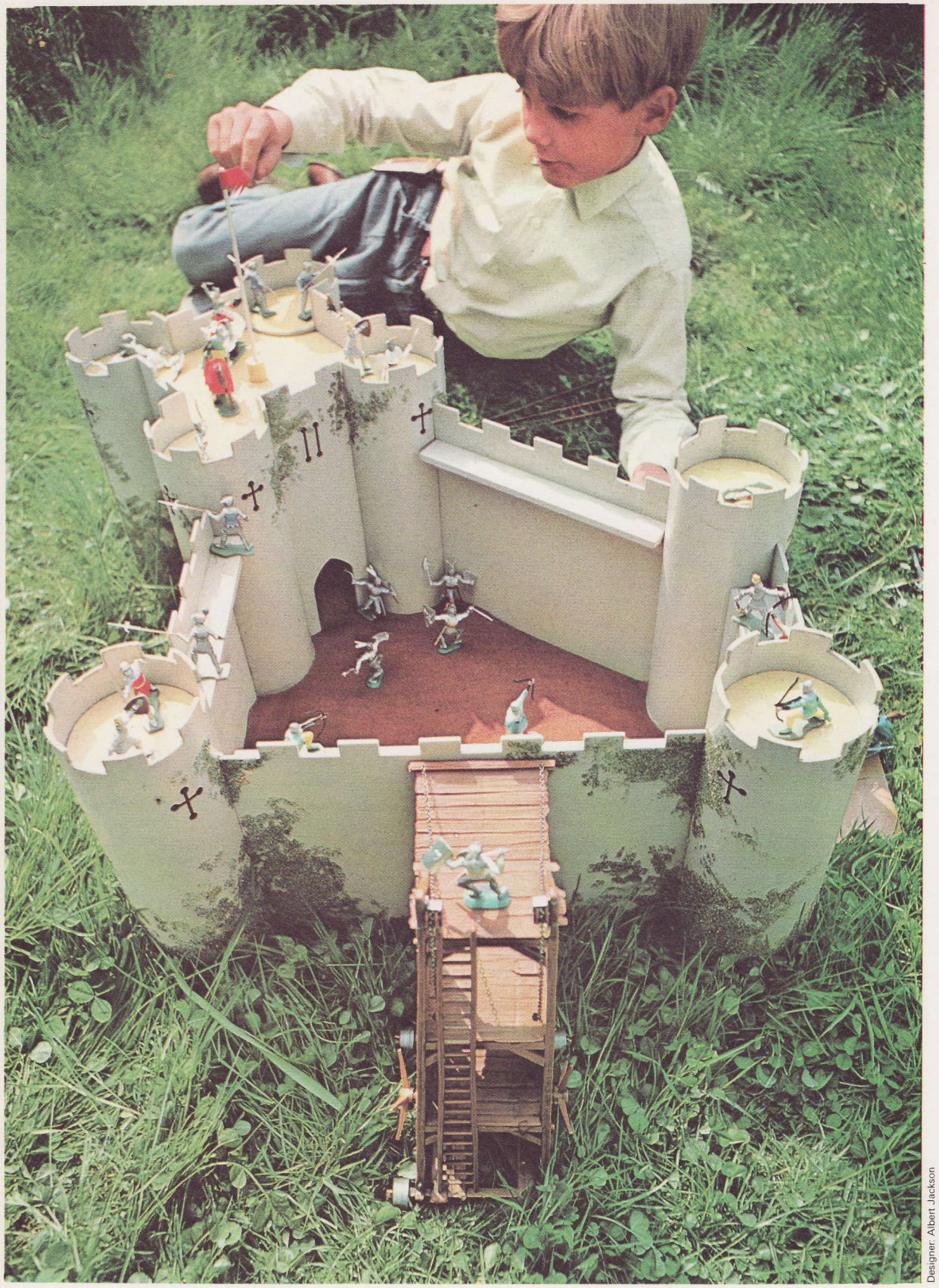
Castle/blackboard/toy boats



Designer: Albert Jackson

Children assemble this castle by slotting cardboard towers and plywood walls together. Plastic ivy is glued to the walls.

Sheet 75

Castle

Insert tower roofs (2) into towers (1) and fix $1\frac{5}{8}$ in. from top with three panel pins through tower walls.

In four towers forming keep, cut away quarter of circumference down to level of roof. Mark out remaining circumference in nine $1\frac{1}{8}$ in. divisions. Cut away alternate divisions $\frac{1}{2}$ in. deep to form battlements. Finish edges with fine abrasive paper.

Cut $\frac{1}{8}$ in. wide linking slots 6 in. deep in top edge of keep walls (3), 1 in. in from sides. Cut $\frac{1}{8}$ in. wide slots in bottom edge of towers so that walls line up with cut-away portions of towers.

Divide remainder of top edge of keep walls into three $1\frac{1}{8}$ in. divisions. Cut away middle division $\frac{1}{2}$ in. deep to form battlements. Cut door in centre of front keep wall (fig. 2). Glue battens (4) to insides of keep walls, $2\frac{1}{8}$ in. from top.

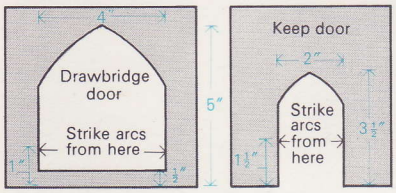


Fig. 2. Door dimensions.

Cut out corners of keep roof (5), so that roof fits easily around towers and rests on battens. Drill $\frac{1}{8}$ in. dia. hole $\frac{1}{2}$ in. deep in flagpole base (6) to take flagpole (7).

Drill $\frac{3}{4}$ in. dia. hole in centre of keep roof and glue flagpole base in it. Push flagpole into hole in base.

Cut $\frac{1}{8}$ in. wide linking slots $4\frac{1}{8}$ in. deep in short edge of drawbridge wall (8), 1 in. from sides. Cut door in centre (fig. 2). Glue catwalk (9) between slots, flush with top edge of wall.

Cut $\frac{1}{4}$ in. wide slots in bottom edge of drawbridge towers to correspond to slots in drawbridge wall. Link wall to towers.

Mark out five $1\frac{1}{8}$ in. divisions on wall (10) and cut away two $\frac{1}{2}$ in. deep battlements. Glue wall to catwalk. Hinge drawbridge to drawbridge wall so that it covers door. Friction of hinge will keep drawbridge raised.

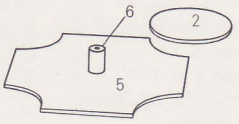
Remaining walls and towers are linked together by $\frac{1}{8}$ in. wide slots in top edges of walls and bottom edges of towers. All slots in walls are 1 in. from ends and are 5 in. deep.

Find positions of 5 in. deep slots in towers by measuring around tower walls. From drawbridge wall (8) to wall (12) is $3\frac{3}{4}$ in. From drawbridge wall to wall (14) is 4 in. From front keep wall (3) to wall (14) is 4 in., and from front keep wall to wall (16) is $4\frac{1}{2}$ in. From wall (12) to wall (16) is $2\frac{7}{8}$ in.

Mark out $1\frac{1}{8}$ in. divisions on all walls and cut $\frac{1}{2}$ in. deep battlements. Mark out tops of towers into 12 equal parts and cut $\frac{1}{2}$ in. deep battlements.

Glue catwalks (13, 15 and 17) to appropriate walls, $1\frac{5}{8}$ in. from top.

Paint all surfaces. Cut windows from black Fablon and stick on to towers.



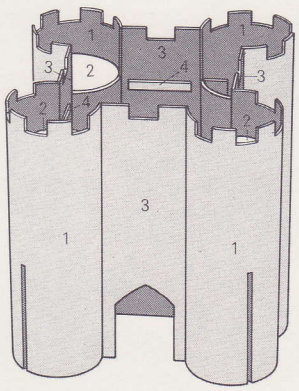
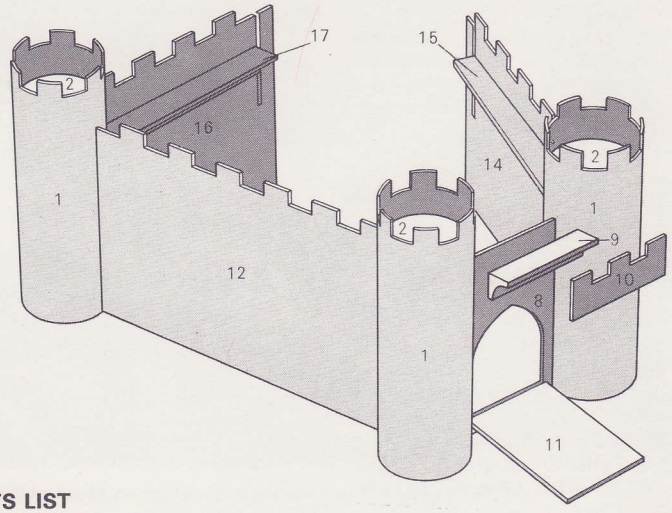


Fig. 1.



PARTS LIST

No.	Name	Quantity	Long	Wide	Thick	Material
1	Towers	7	12″	4″ dia.		cardboard tube
2	Tower roofs	7	to fit		$\frac{1}{4}$″	plywood
3	Keep walls	4	12″	$5\frac{5}{8}$″	$\frac{1}{8}$″	plywood
4	Battens	4	3″	$\frac{3}{8}$″	$\frac{1}{4}$″	ramin
5	Keep roof	1	$7\frac{1}{4}$″	$7\frac{1}{4}$″	$\frac{1}{4}$″	plywood
6	Flagpole base	1	$1\frac{1}{4}$″	$\frac{3}{4}$″ dia.		dowel
7	Flagpole	1	7″	$\frac{1}{8}$″ dia.		knitting needle
8	Drawbridge wall	1	$8\frac{1}{4}$″	7″	$\frac{1}{4}$″	plywood
9	Catwalk	1	$4\frac{3}{4}$″	$1\frac{1}{8}$″	$1\frac{1}{8}$″	scotia moulding
10	Wall	1	$5\frac{5}{8}$″	$1\frac{7}{8}$″	$\frac{1}{8}$″	plywood
11	Drawbridge	1	6″	$4\frac{1}{4}$″	$\frac{1}{4}$″	plywood
12	Wall	1	$15\frac{3}{4}$″	10″	$\frac{1}{8}$″	plywood
13	Catwalk	1	$13\frac{1}{2}$″	$1\frac{1}{8}$″	$1\frac{1}{8}$″	scotia moulding
14	Wall	1	$12\frac{3}{8}$″	10″	$\frac{1}{8}$″	plywood
15	Catwalk	1	$10\frac{1}{8}$″	$1\frac{1}{8}$″	$1\frac{1}{8}$″	scotia moulding
16	Wall	1	$11\frac{1}{4}$″	10″	$\frac{1}{8}$″	plywood
17	Catwalk	1	9″	$1\frac{1}{8}$″	$1\frac{1}{8}$″	scotia moulding

HARDWARE: two $\frac{3}{4}$ x $\frac{1}{4}$″ (closed) brass hinges

Note: dimensions are finished sizes; when ordering materials, allow extra for waste