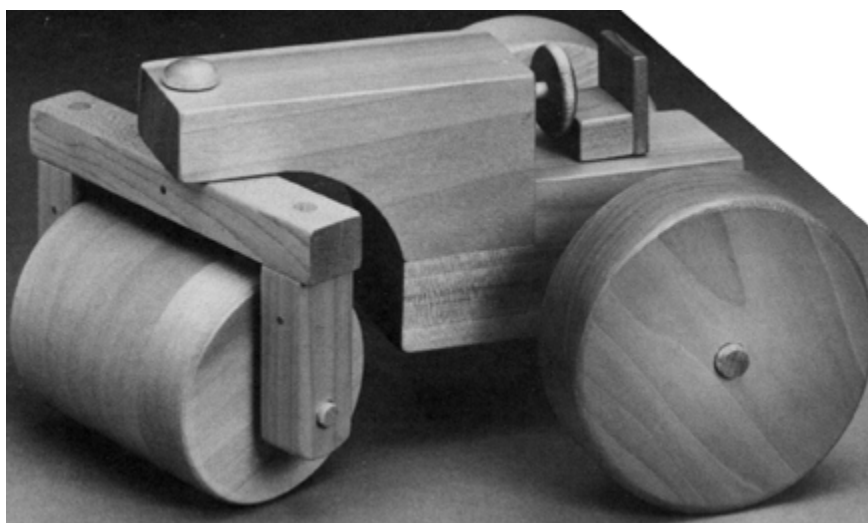




Project 19559EZ: Toy Steam Roller

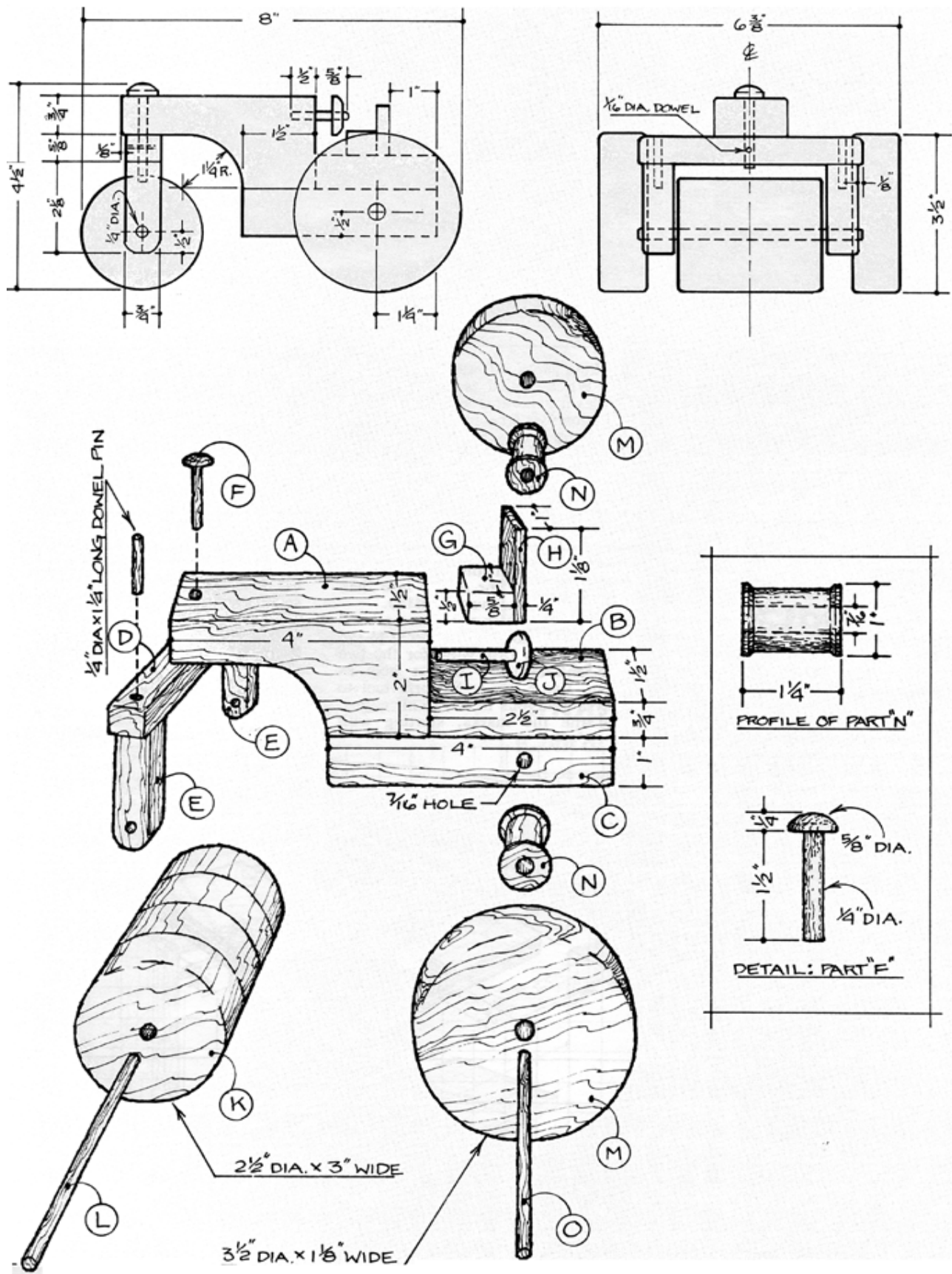
Kids will find that back-yard construction can be even more fun with a sturdy steam roller toy like this. Poplar was used for all parts, although maple or oak would also be good choices. Of course, even pine can be used, but it's much more susceptible to dents and scratches.

Toy Steam Roller Materials List

Part	Description	Size	No. Req'd
A	Hood	1-1/2" x 2" x 4"	1
B	Floor	3/4" x 1-1/2" x 2-1/2"	2
C	Undercarriage	1" x 1-1/2" x 4"	1
D	Steering Bar	5/8" x 3/4" x 4-5/8"	1
E	Roller Support	5/8" x 3/4" x 2-1/8"	1
F	Pivot Pin	See detail.	1
G	Seat	1/2" x 5/8" x 1"	1
H	Seat Back	1/4" x 1" x 1-1/8"	1
I	Steering Post	3/16" dia. x 1-1/8" long	1
J	Steering Wheel	1" dia. x 1/4" wide	1
K	Roller	1/4" dia. x 3" wide	1
L	Roller Axle	1/4" dia. x 4-1/2"	1
M	Wheel	3-1/2" dia. x 1-1/8" wide	2
N	Spacer	See detail.	2
O	Wheel Axle	3/8" dia. x 6-1/2"	1

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Toy Steam Roller Complete Schematic



Toy Steam Roller Step-by-Step Instructions

1. Cut the hood (part A) to length, width and thickness.
2. Lay out and mark the location of the 1-1/4" radius as shown.
3. Use a band or saber saw to cut out the curve.
4. Cut the floor (part B) and the undercarriage (part C) to size.
5. Drive a couple of short brads in part C (don't locate them in line with axle holes), then clip the heads off so that about 1/8" is exposed. This will keep the two parts from sliding when glued and clamp.
6. Use glue to join parts B and C together.
7. Clamp securely and allow to dry.
8. Glue parts B and C to part A, again using clipped brads, glue, and clamps.
9. Allow the glue to dry.
10. Mark the location of the wheel axle hole on part C.
11. Drill a 7/16" diameter through hole as shown.
12. Cut the steering bar (part D) and the roller support (part E) to the dimensions shown in the materials list.
13. Drill the 1/4" diameter holes for the roller axle (L) as shown.
14. Round the bottom of parts E.
15. Glue and clamp parts E to part D. **NOTE: Parts E are set back 1/8" from each end of part D.**
16. Allow the glue to dry.
17. Drill for the 1/4" diameter by 1-1/4" long pins as shown.
18. Cut the pins a little on the long side.
19. Glue the pins in place.
20. Allow the glue to dry.
21. Sand the pins flush with surface.
22. Lathe-turn part F, the pivot pin, to the dimensions shown.
23. Use a 1" hole saw to cut the steering wheel (J) from 1/4" thick stock.
24. Glue the steering wheel in place.
25. Drill a 1/2" deep hole in the hood (A) for part I.
26. Sand part I so that it turns freely in the hole.
27. Glue parts G and H together.
28. Glue both parts G and H to part B. **NOTE: When glued in place, part G will prevent the steering wheel (J) and post (I) from coming out, yet the wheel and post will be free to turn in the hole.**
29. Glue four pieces of 3/4" thick x 3" square stock together for the roller (K).
30. Lathe-turn the roller to 2-1/2".
31. Make the center hole in the drum just large enough so that it will revolve easily on the axle (L).

32. Lathe-turn the wheels (part M).
33. Sand the edges smooth.
34. Use a 1" dowel to make the spacer (N) can be a one" dowel.
35. Give all parts a complete sanding, taking care to remove sharp edges.
36. Complete assembly as shown.
37. Leave unfinished.

These plans were originally published in Volume 7, Issue 2 of *The Woodworker's Journal* (Mar./Apr. 1983, pages 50-51).