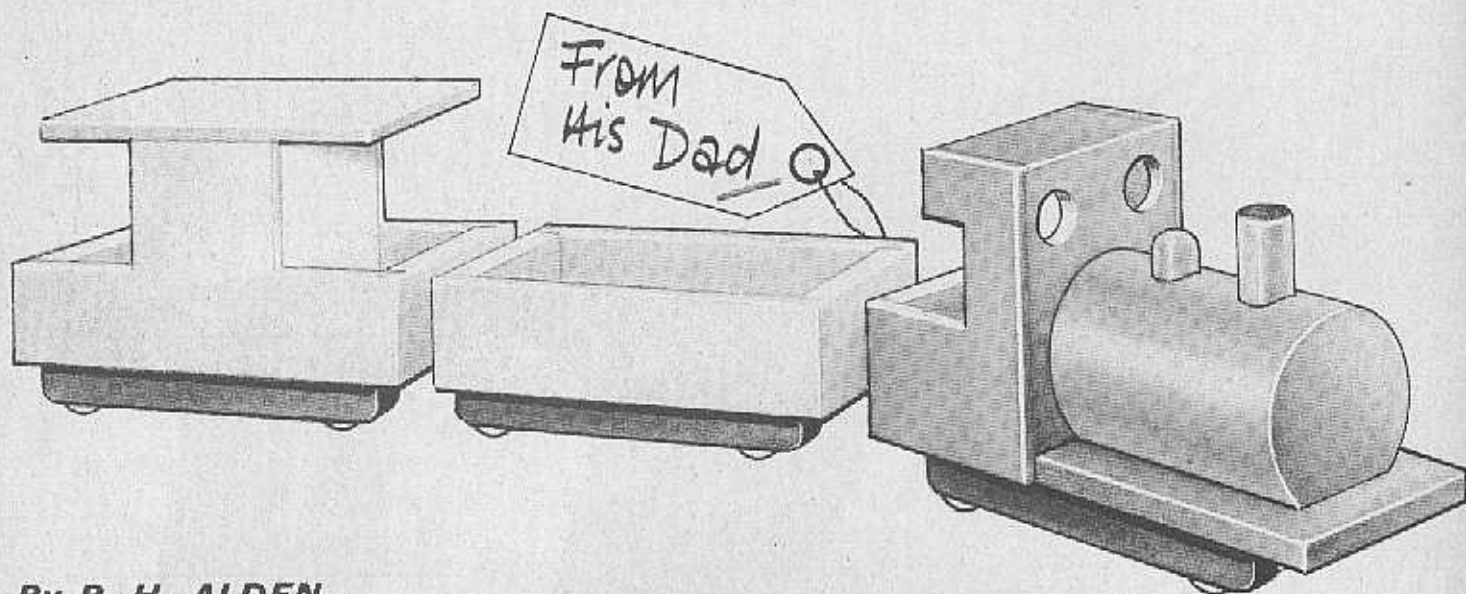


# TOY TRAIN FOR A BOY



By P. H. ALDEN

ALTHOUGH STEAM TRAINS are an anachronism, and the iron horse is now represented on British Rail by a few residual workings, the toy train is still a considerable favourite with boys.

This toy train set, comprising locomotive, wagon and guard's van, was made from scraps of ply (mostly 9mm) and a block offcut, which was turned on the lathe to form the boiler.

The train possesses an unusual feature inasmuch as there are no wheels. These can be a constant problem on toys because they sometimes fail to revolve, or get broken, or just fall off! They have been replaced on this train set by rollers, which in practice perform very much better on the sitting room carpet, where many an aspiring engine driver handles his first locomotive.

Chassis—or frames in railway jargon—of all three units are similar in construction, being made up of a ply platform and two side rails drilled to take the roller axles. Axle holes must be in alignment, so if you make a train set like this it is advisable to drill the side rails while they are held together in pairs in the vice.

I used a lathe to turn the boiler but a circular form can be produced by sawing a square block to octagonal form then using a plane to reduce it to a cylinder. It requires a "flat" along the bottom so that it can be more easily glued and screwed to the base.

Chimney and steam dome are made from dowel of suitable diameter and glued into stub mortises drilled in the boiler.

If you have no drill large enough to

## CUTTING LIST

### Engine

Rails	2 off	6½ in.	by	½ in.	by	½ in.
Base	1 off	6½ in.	by	3½ in.	by	9mm
Cab roof	1 off	3½ in.	by	1½ in.	by	9mm
Cab front	1 off	4½ in.	by	3½ in.	by	9mm
Cab sides	2 off	4½ in.	by	3½ in.	by	4mm
Tail board	1 off	3½ in.	by	2 in.	by	9mm
Boiler	1 off	4½ in.	by	2½ in.	by	2½ in.

### Wagon

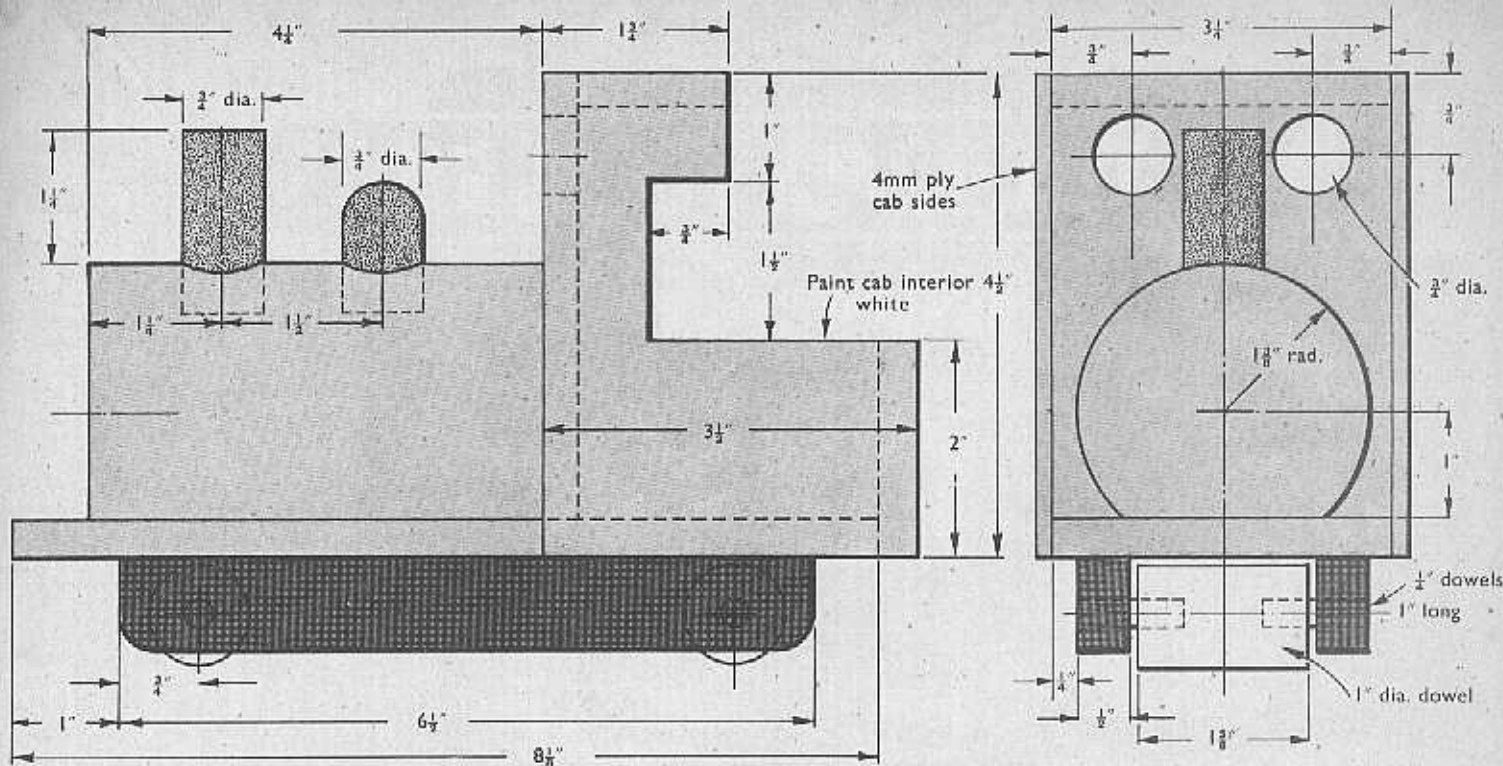
Rails	2 off	6½ in.	by	½ in.	by	½ in.
Base	1 off	6½ in.	by	3½ in.	by	9mm
Ends	2 off	3½ in.	by	2 in.	by	9mm
Sides	2 off	7½ in.	by	2 in.	by	4mm

### Guard's van

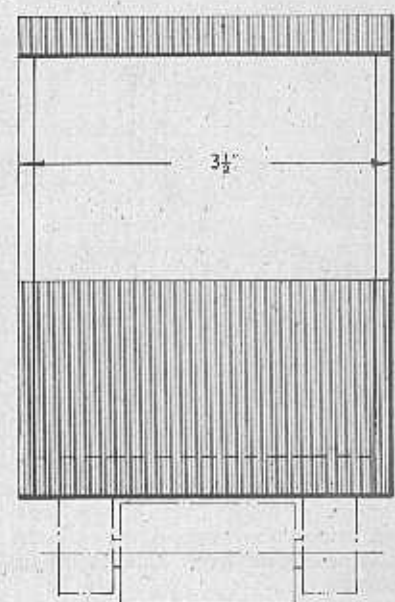
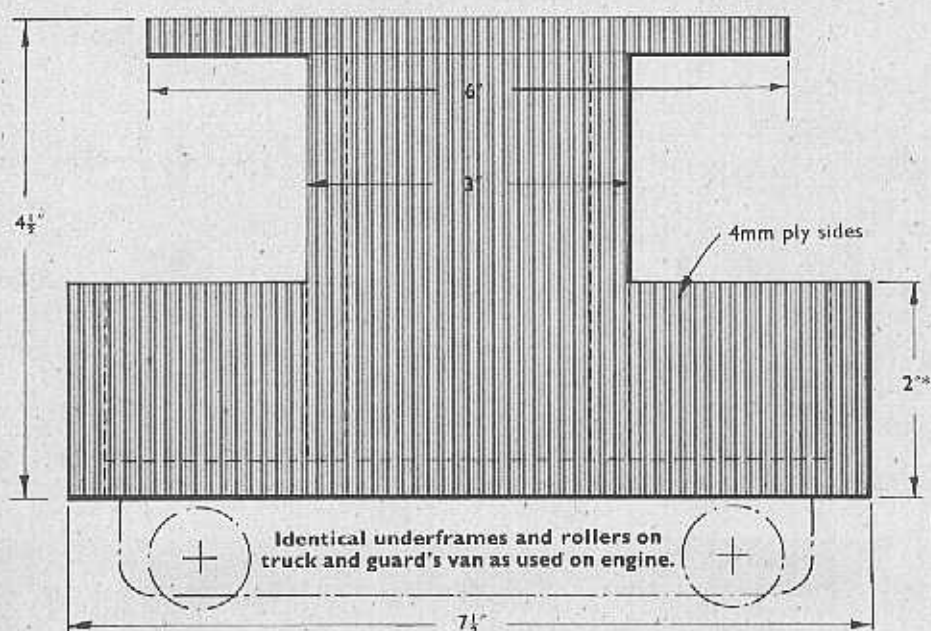
Rails	2 off	6½ in.	by	½ in.	by	½ in.
Base	1 off	6½ in.	by	3½ in.	by	9mm
Ends	2 off	3½ in.	by	2 in.	by	9mm
Partitions	2 off	3½ in.	by	3½ in.	by	8mm
Top	1 off	6 in.	by	3½ in.	by	9mm
Sides	2 off	7½ in.	by	4½ in.	by	4mm

No allowance has been made for waste.

Also required: Two rollers 1½ in. by 1 in. dia.; four axles 1 in. by ½ in. dia.; couplings.



9mm ply used throughout unless otherwise stated



\* Height of sides on box truck  
(Paint exterior yellow—interior white)



Red



Yellow



Black



Blue

make the  $\frac{1}{16}$  in. diameter spectacles—cab windows—they could be cut out with a fretsaw, or roughly circular holes could be chopped with a  $\frac{1}{16}$  in. chisel and brought to shape with a rasp.

Notice that the sides and ends of the wagon and guard's van overlap the base to conceal the ply edges. In assembling the guard's van the following sequence is advised: partitions, ends, sides, then top.

There are two ways of making the rollers free to revolve—allowing the axles ( $\frac{1}{16}$  in.

dowel) to rotate in the rails; or permitting the rollers to turn on the axles. I chose the former method, so after drilling the rollers a droplet of glue was squeezed into the holes and the dowels were passed through the rails and into the rollers. Surplus glue was removed immediately to avoid a "breakdown" on the trial run.

Nearly all paints are now non-toxic, but if you decide to use up some old stuff make sure it is lead-free. For a good finish and ease of application the com-

ponents should be painted before assembly. Use a primer, undercoat and at least two gloss top coats for a quality finish. This kind of toy takes a lot of bashing—and undoubtedly it will be involved in a few "crashes"—so the more paint the better.

Couplings can be simple hooks and eyes, such as I used, or if respect for authenticity is desired a single link from a chain fitted to an eye attached to one vehicle can engage with a hook on the following vehicle.