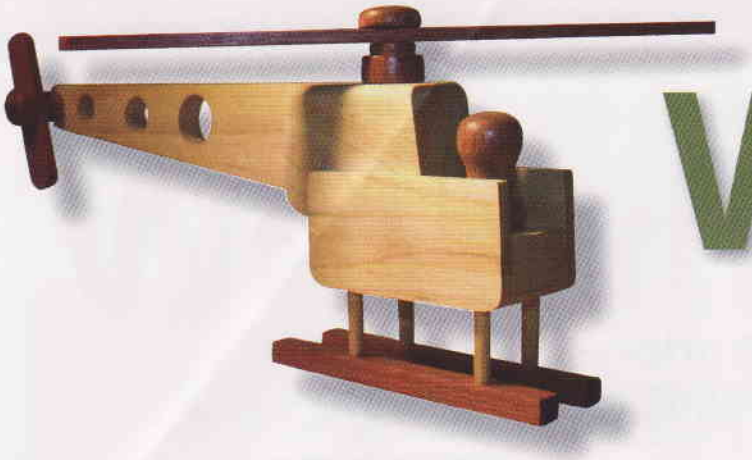


Wood, clean fun

Chris Beswick offers you a number of ideas for wooden vehicle toys. Ideal gifts for the little ones.

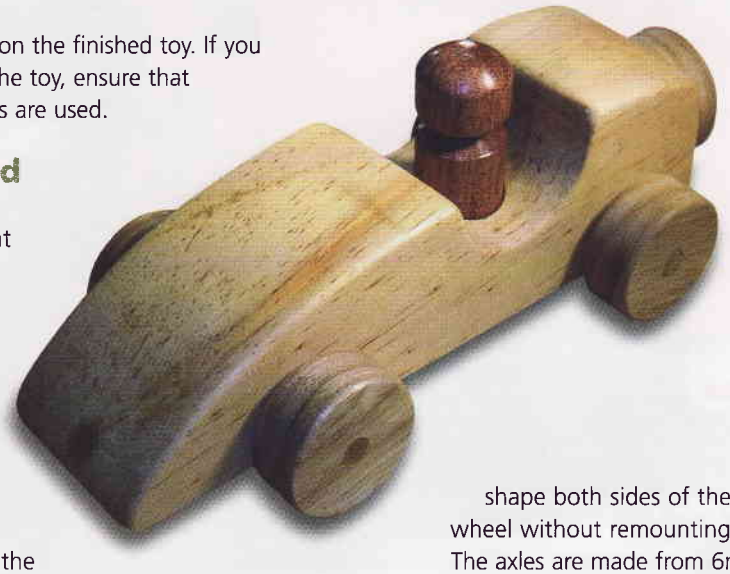
When constructing toys for young children, a simple representation is usually enough; fine details are not required as the child's imagination will fill in the gaps. Wooden toys have some advantages over their plastic and metal counterparts; they are tough, sturdy and are safe to play with, providing safety is taken into account in their design and construction. They are also simple and fun to make.

The toys described here have been constructed entirely from wood and PVA glue, using pine for the bodies and hardwood for the wheels – in this case ash. The axles are made from 6mm dowel. Details such as headlights and drivers are made out of a contrasting hardwood, and here I used rosewood. Special attention should be paid to ensuring that there are no rough edges on the finished toy. If you intend to paint the toy, ensure that non-toxic finishes are used.

If you do decide to make the wheels yourself, they can either be turned on the lathe or made using a holesaw. I used a combination of both. The standard pilot drill on the holesaw is 6mm, so I made a mandrel from a 6mm coach bolt.

Wheels and axles

If you don't want to make the wheels yourself, they can be bought. If you do decide to make them, they can either be turned from scratch on the lathe or made using a holesaw. I have used a combination of both, cutting them initially using a 35mm holesaw and finishing them on the lathe. The standard pilot drill on the holesaw is 6mm, so I made a mandrel from a 6mm coach bolt, cutting off the head and drilling the end slightly to make a conical recess. This enables the tailstock to be used to support the mandrel during the turning process. The wheels are held in place by a smaller wooden spacer at the headstock end and a nut and washer at the tailstock end. I have left the wheels plain, but you could shape them and cut grooves to represent tyre treads if you wish. Using smaller discs as spacers provides enough space between the wheels to shape both sides of the wheel without remounting.



The axles are made from 6mm dowel which has been lightly sanded. Axle holes need to be slightly larger, say 6,5mm so that they can turn freely without binding. In the case of the car, the axle holes are drilled directly into the body, for the truck, separate axle bearers have been glued into place.

The touring car

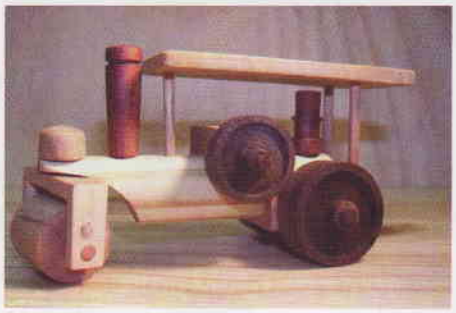
This is the simplest vehicle to make. The example shown is 155mm in length and 44mm wide. The 35mm holesaw is used to make the recess for the driver. The removable driver is 37mm long and just over 19mm in diameter enabling a snug fit in the 20mm hole. You may decide to glue the driver into place if you are making the toy for a very young child. If you don't have a lathe, this part can also be purchased.

The log truck

The truck is slightly more complicated and is made from a number of small pieces of pine. It is 145mm long and has a width of 70mm. The axle bearers are 25mm x 10mm. The remainder of the truck is made up from small blocks as shown in the photograph. As a guide, the cargo deck of the truck is 70mm long. The logs are 120mm in length and are made of 19mm dowels. The headlights are turned on the lathe from rosewood. An alternative would be short pieces of rounded dowel.

The helicopter

The helicopter is made of 32mm pine and is 175mm long and 70mm wide. The pilot space is drilled out to a diameter of 45mm and a 20mm hole made through the roof and partly into the base to accommodate the pilot. It is best to drill the 20mm hole first to avoid breakout on the roof of the pilot's compartment. The rosewood rotor bosses are turned on the lathe, a hole drilled partially into the bottom of each to allow the 6mm dowel shaft to be glued in. A nylon washer is used between the main rotor (12mm x 12mm pine and 120mm in length) and the body of the helicopter to enable it to spin freely.



Other possibilities

There are many other types of wooden vehicles which can be made using the same basic techniques. Measurements can be derived from photographs ensuring that whatever the size of the toy, the proportions will be correct. The toys in the photographs above probably belong more in the model category, and would not be suitable for young children as they contain some smaller parts and also would be more easily damaged. The steam engine, for example, has working steering. I hope that these thoughts will inspire you to have many creative idea of your own.