If you're thinking about toying around with trucks, Chris Beswick shows you how to make one from wood.

Timber trucking

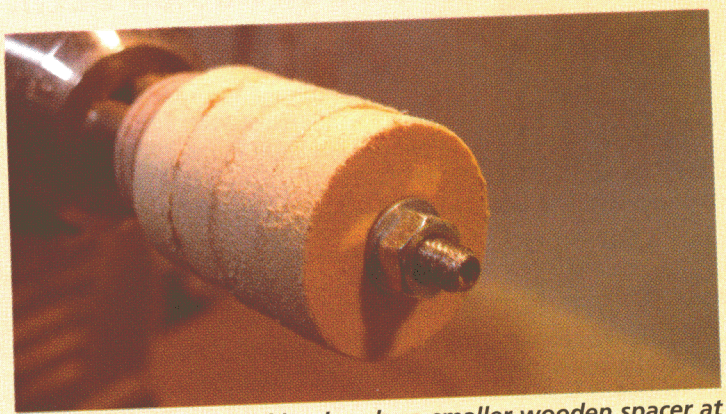
This truck is made from contrasting hardwoods and has a plain Danish oil finish. No metal parts are used in the construction. I used mainly rosewood and ash, but any contrasting woods would be suitable.

It is a reasonably simple project to make, and could be made almost entirely with hand tools, but a power fretsaw makes the shaping of the cab and cutting out of windows a lot easier, and a bench drill is necessary for the construction of the wheel arches and drilling of axle holes etc. A band saw was used for re-sawing stock. A lathe is also handy, but parts made from various sized dowels can be substituted. I would recommend that the components are sanded as you complete them, before assembly, as it makes sanding easier and definitely helps to improve the overall finished look of the toy. The same basic techniques of construction can be applied to many other designs of toy vehicles. Different cabs and trailers could easily be made using variations on the methods described here.

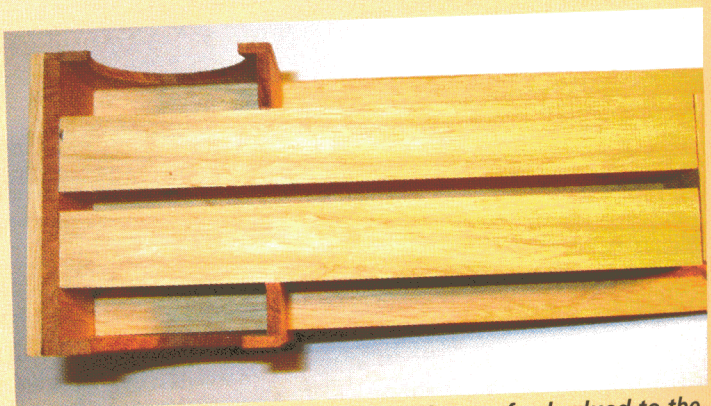
Wheels

Obtain or make the wheels before starting the project. The ones I used for this project are called 'Rubbariders'. They have quite authentic looking, non-marking synthetic rubber tyres, and were obtained from the United States. There are no local suppliers that I am aware of. They are 1½ inch in diameter and have 6mm axles. Should you wish to use these, try a search on the Internet for 'Rubbariders'. They are available from www.woodcraft.com and www.rockler.com. They are a small extravagance at $4 or so per set plus postage, but they do look good and are very well made.

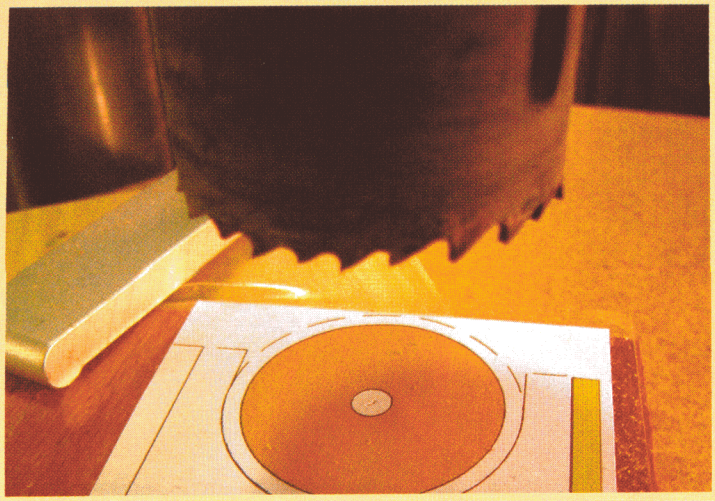
If you do decide to make the wheels, they can either be turned from scratch on the lathe or made using a hole saw. I have usually employed a combination of both, cutting them initially using a hole saw and finishing them on the lathe. The standard pilot drill on the hole saw is 6mm, so I have made a mandrel from a 6mm coach bolt, cutting off the head and drilling the other end slightly to make a conical recess. This enables the tailstock to be used to



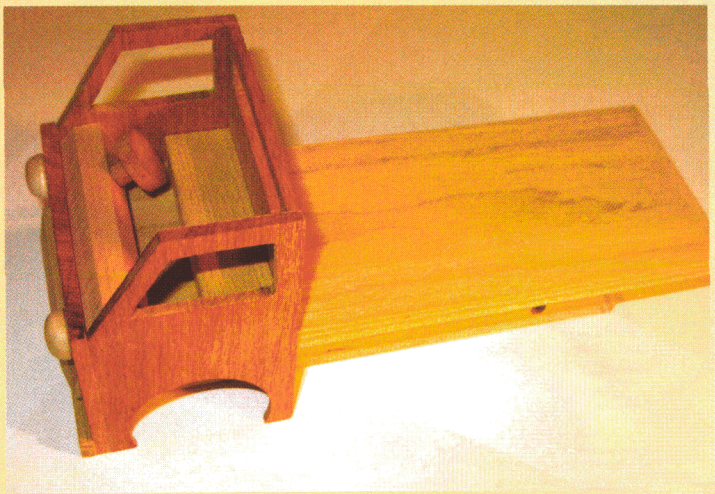
The wheels are held in place by a smaller wooden spacer at the headstock end and a nut and washer at the tailstock end.



The chassis are made from two pieces of ash glued to the platform.



Cutting out the wheel arches using a 44mm hole saw.



The bench seat is cut to size and glued into the platform and the back part of the cabin.

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. You could leave the wheels plain, or 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. Axles can then be made from 6mm dowel.

The chassis

The chassis are made from two pieces of ash glued to the platform, also made from ash. The photo was taken after the cab was assembled onto the chassis. The sides should be drilled for the axles before gluing to the platform. The side holes for the front axles are 11mm from the underneath of the chassis members, and 29mm from the front. The back ones are 25mm from the end of the chassis members. The end caps on the platform and the chassis are added after the main part of the chassis is complete. Measure the wheel thickness and mark and set the two chassis members accordingly to provide comfortable space for the wheels, so that they do not project beyond the wheel arches.

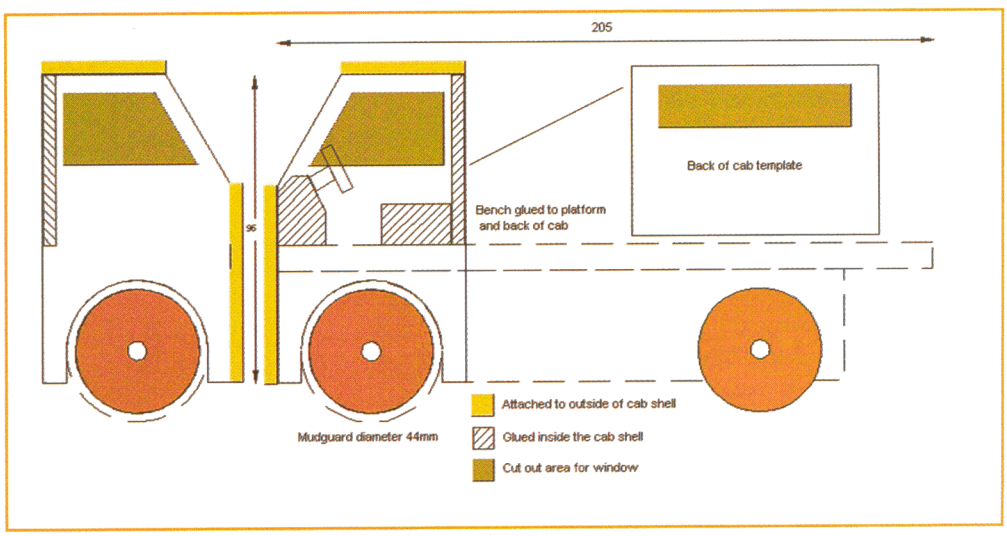
In all the stages of making of this toy, it is better to proceed a step at a time, and not cut out any pieces in advance. A better fit will be attained if the required piece is cut individually after re-measuring to get the precise dimensions required. Glue the two longitudinal members to the platform, clamp and set aside to dry. When the main chassis is dry, cut out the end caps to fit and glue in place at the back of the chassis.

The cab

Cut out the two blanks for the cab sides. The template shown is full size to fit 1½ inch wheels, so it can be photocopied and stuck temporarily to the wood to aid the cutting and shaping. If you were using 2 inch wheels, then the whole plan and dimensions of the parts could be scaled up by 33% accordingly. I originally made a pine and plywood prototype for this toy, and this used 2 inch wheels.

The best way to stick the template to the wood is with double-sided tape – the variety that is thin and transparent is the best. It can be removed with no damage and generally leaves no residual glue on thesurface of the wood.

Begin by cutting out the wheel arches using a 44mm hole saw. Use a scrap piece of wood underneath. The cab side should be held down securely to the drill table with a hold-down device or clamps during drilling. The template has a 6mm white area in the centre of the wheel arch to aid in lining up the pilot drill of the hole saw. 3mm holes drilled at the inside corners of the windows will help when cutting out on the fretsaw. Next, cut the outline of the sides and windows using the fretsaw. Remove the tape and sand carefully. Small sanding files are useful for tidying up the



The toy truck template.