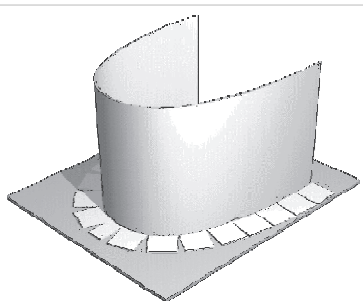
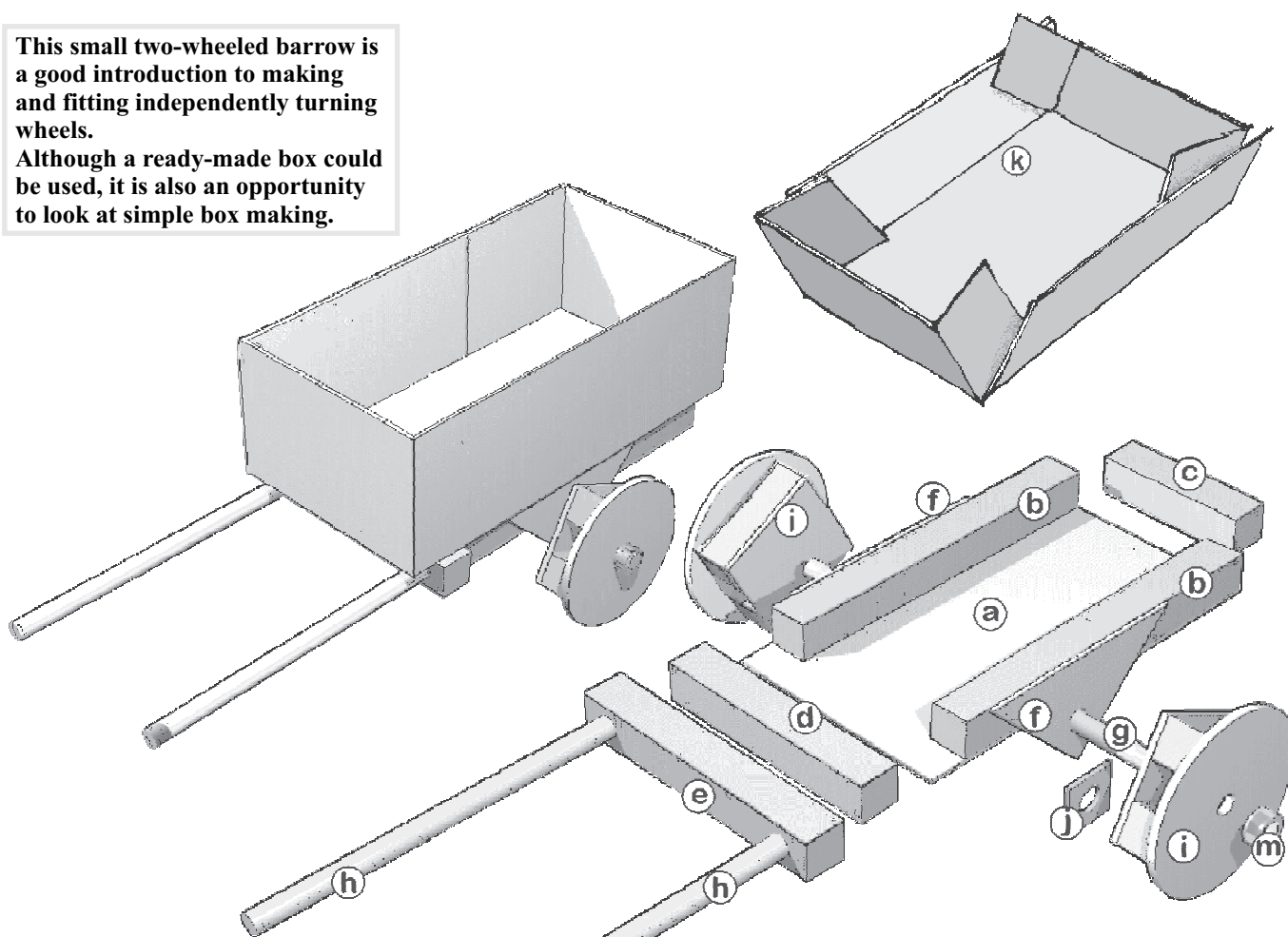


This small two-wheeled barrow is a good introduction to making and fitting independently turning wheels.

Although a ready-made box could be used, it is also an opportunity to look at simple box making.



With a top something like this you would have a reasonable chariot.

- | | |
|---------------------------------|-----------------------------------|
| (a) (1) base - card 10 x 6cm | (g) (1) axle - dowel 11cm |
| (b) (2) frame - wood 9cm | (h) (2) shaft - dowel 10cm |
| (c) (1) frame - wood 4cm | (i) (2) wheel (see 'wheels' page) |
| (d) (1) frame - wood 6cm | (j) (2) card washer |
| (e) (1) shaft holder - wood 6cm | (k) (1) box - card A5 |
| (f) (2) card triangle - 4 x 4cm | (m) (2) stopper - PVC tubing |

- Begin with the card base. Build the wooden frame directly onto the card. Note that the piece of wood (d) fits across the card at the shaft end. This makes an even surface on which to glue the drilled shaft holder.
- Fit the card triangle axle mounts. Put the axle (or spare dowel) through the holes while gluing. This will make sure that they line up properly.
- Fit the shafts and the drilled shaft holder. Whatever way you do this the unit will need supporting until the glue is set.
- Make and fit the box. The fold lines will need to be scored. Notice that the box reinforces the frame's corner joints, so make sure that there is an even spread of glue all over the top of the frame.
- Fit the wheels you have made (look on the 'wheels' page, page 27, for ways to make suitable wheels). With this arrangement you will find that the axle can turn in the card mount. It is important to remember that each wheel should turn freely, even when the axle is held.