TRUCK WITH BRICKS

All children like to have a solidly built truck or lorry to push about. This one incorporates its load as well, multi-coloured bricks as in 'Building blocks in box'.

DIAGRAM 1

Chassis and cab assembly. The chassis and cab assembly are made from the two pieces of timber (1) and the four pieces of timber (2, 3 and 4). Glue all these pieces together and, when the glue is set, mark out the shape of the cab. On the end of each main frame (1) mark a 45-degree slope, leaving a ½in (12mm) vertical surface for the tailgate to be attached. Cut out the shape of the cab and the main frame with a coping saw or bandsaw.

Mark the centres of the holes for the axles on the main frames ½in (12mm) from the bottom of the frame and 1in (25mm) in from the curves of the cab bottom and the tailgate. Drill ½in (12mm) holes for the axles. When drilling the hole for the rear axle, place a piece of scrap timber between the main frames for support. Drill these holes vertically through the assembly to ensure that the wheels will run smoothly.

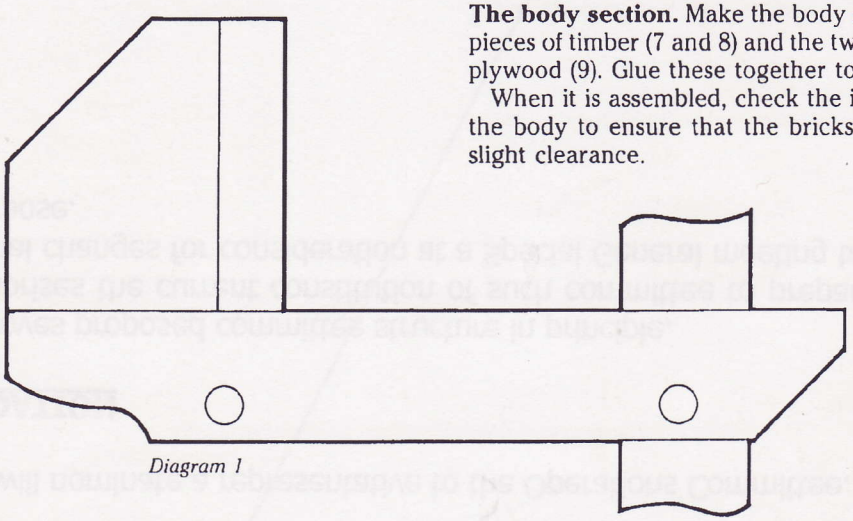


Diagram 1

DIAGRAM 2

Cut out the four wheels (12) with the hole saw (see Tools, page 11) and two dowels for the axles (6). Insert an axle into one wheel, ensuring that the axle finishes flush with the outside edge of the wheel. When this is done, glue the wheel in position. Repeat this operation for the second axle. Place the pieces of ¼in (6mm) ply (5) square with the back and top of the cab section. Insert an axle and wheel in the hole in the main frame at the cab bottom. Mark the shape of the cab and the wheel on the plywood. Allow ¼in (6mm) clearance around the wheel and cut to shape, (shaded areas in Diagram 2). Glue both pieces in position on the cab sides to simulate mudguards.

The wheels and axles should be put on one side at this stage until the assembly has been painted.

DIAGRAM 3 (see next page)

The body section. Make the body section from the three pieces of timber (7 and 8) and the two pieces of ¼in (6mm) plywood (9). Glue these together to form a box.

When it is assembled, check the internal dimensions of the body to ensure that the bricks will fit into it with a slight clearance.

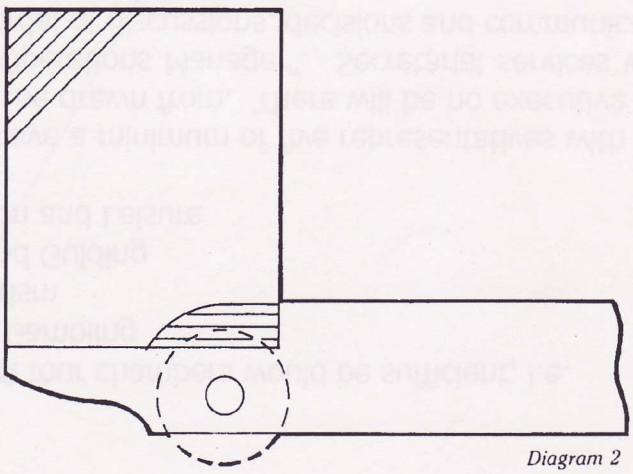


Diagram 2

DIAGRAM 4

Glue the body on to the mainframe and cab section, allowing an equal overhang at each side. Cut a piece of 3/16in (4mm) plywood (10) to shape for the tailgate by rounding the two bottom corners. This can be cut with a coping saw. Glue this in position on to the mainframes and in line with the body section.

At this stage, it is advisable to paint the whole assembly and the wheels. Ensure that no paint gets into the holes in the mainframes where the axles fit. When dry, the wheels and axles should be inserted into the holes in the mainframe and the second wheels pushed on at the opposite side until the axles are flush with the outside edge. Check that the wheels revolve freely. When this is achieved, remove the two wheels, apply a small amount of glue on the end of the axles, and push the two wheels back into position, with the axle flush with the outside edge of the wheel. Care must be taken when applying the glue to the axle to prevent any coming into contact with the mainframe, and so preventing free movement of the axle.

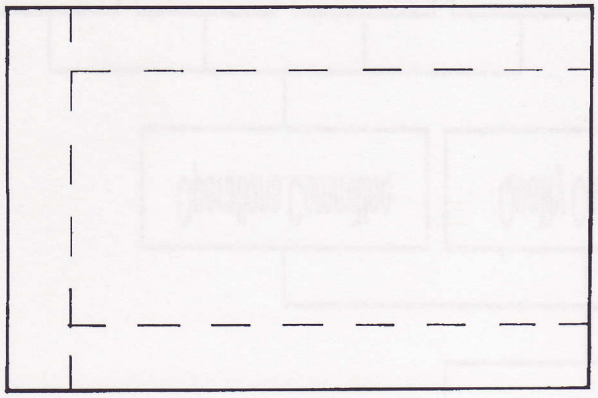


Diagram 3

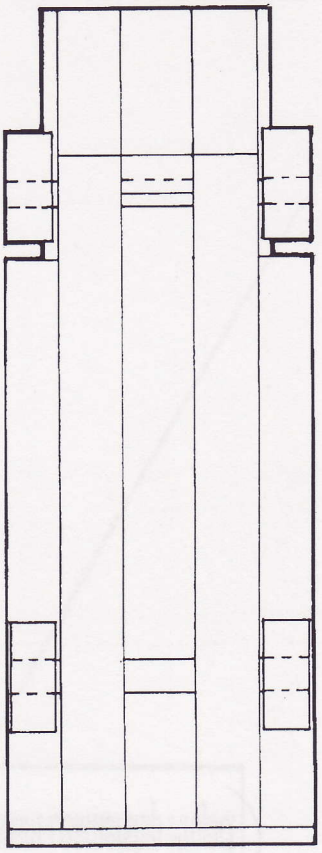


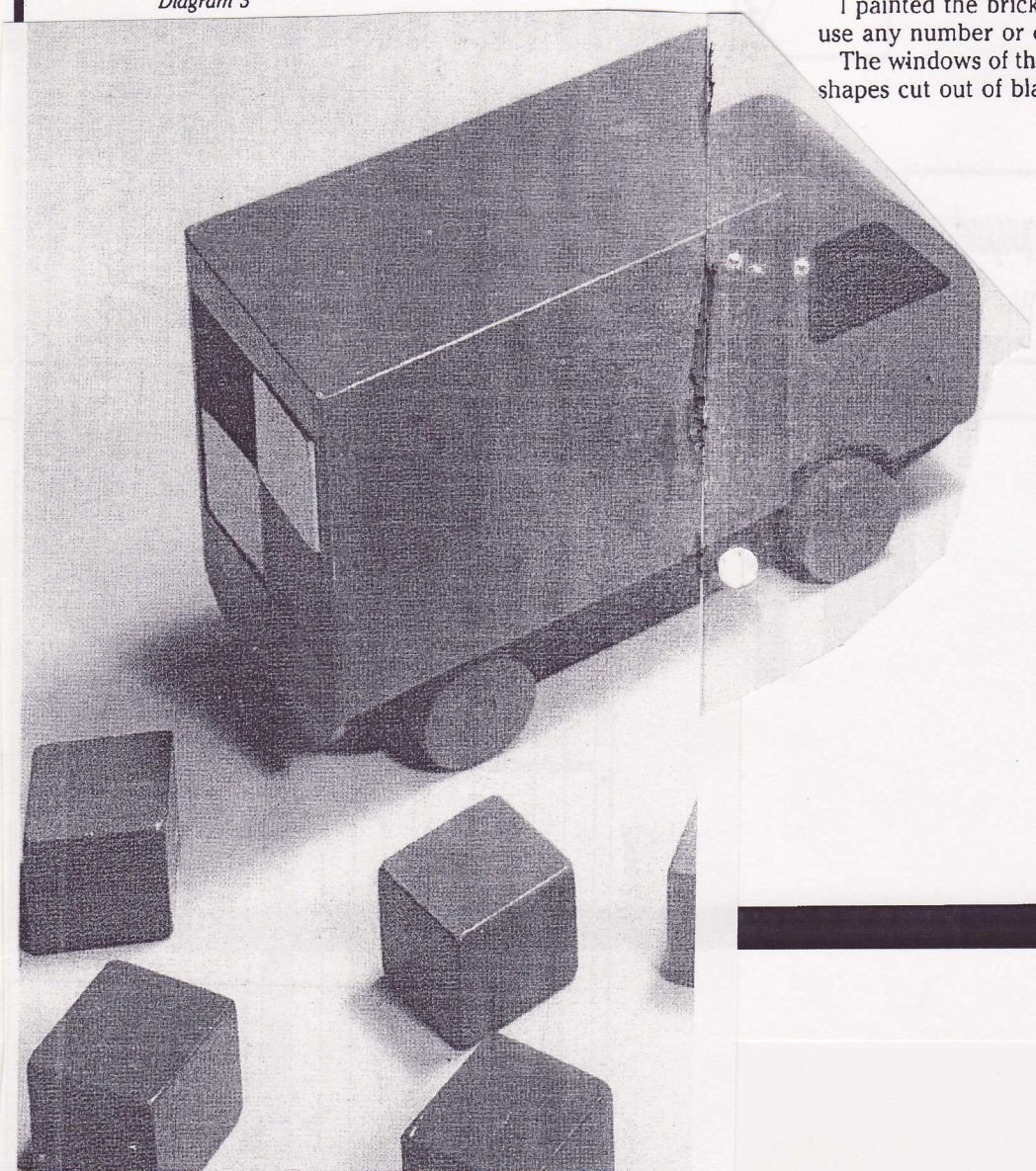
Diagram 4

THE BRICKS

Cut sixteen bricks (11) from 1⅞ × 1⅞ × 1⅞in (45 × 45 × 45mm) timber, ensuring that they are cubes. Treat each brick with sandpaper, removing sharp edges and corners.

I painted the bricks four different colours, but you can use any number or combination of colours you prefer.

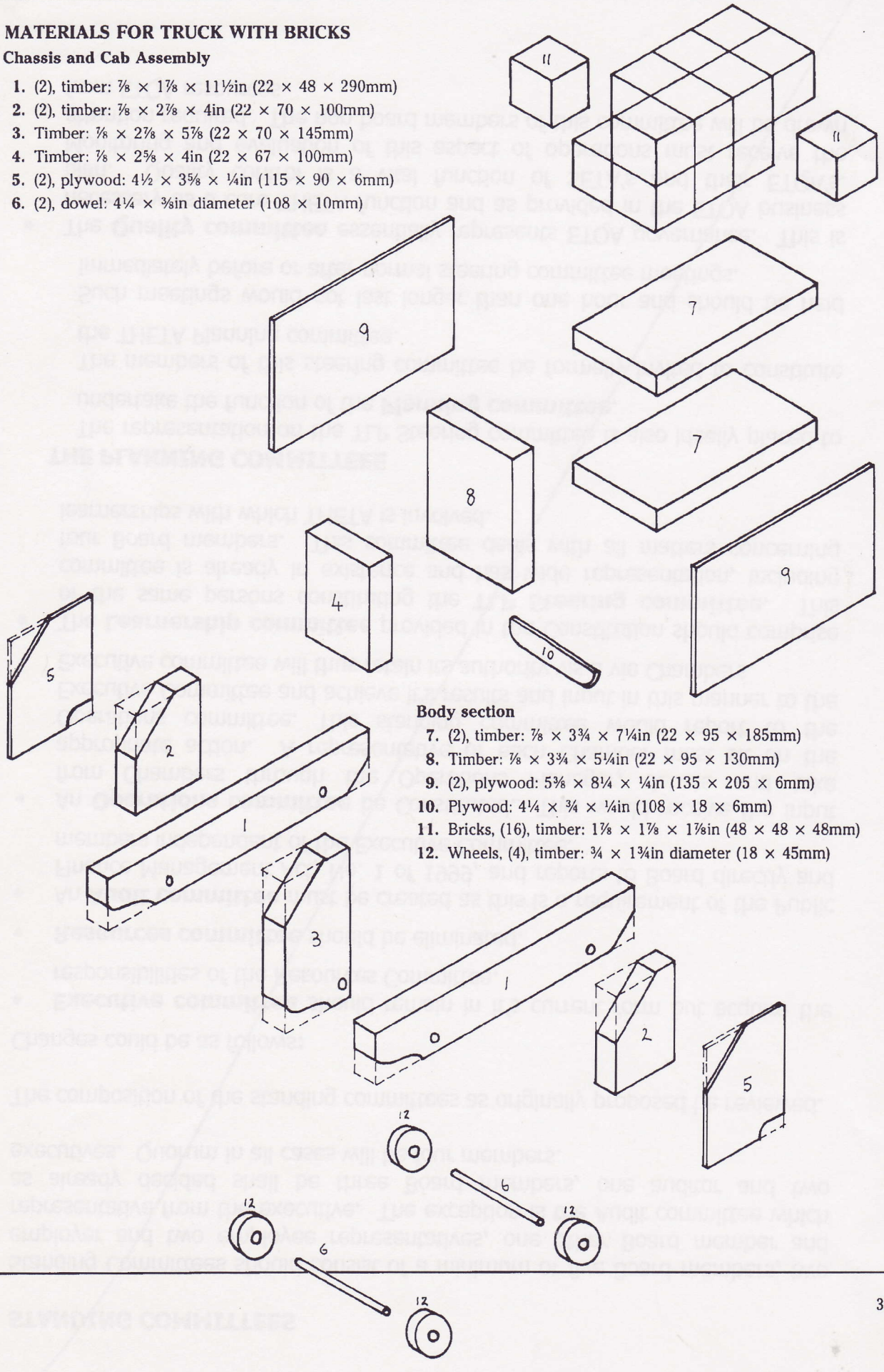
The windows of the cab can either be painted on, or the shapes cut out of black adhesive material and stuck on.



MATERIALS FOR TRUCK WITH BRICKS

Chassis and Cab Assembly

1. (2), timber: ⅞ × 1⅞ × 11½in (22 × 48 × 290mm)
2. (2), timber: ⅞ × 2⅞ × 4in (22 × 70 × 100mm)
3. Timber: ⅞ × 2⅞ × 5⅞ (22 × 70 × 145mm)
4. Timber: ⅞ × 2⅝ × 4in (22 × 67 × 100mm)
5. (2), plywood: 4½ × 3⅝ × ¼in (115 × 90 × 6mm)
6. (2), dowel: 4¼ × ⅜in diameter (108 × 10mm)



Body section

7. (2), timber: ⅞ × 3¾ × 7¼in (22 × 95 × 185mm)
8. Timber: ⅞ × 3¾ × 5¼in (22 × 95 × 130mm)
9. (2), plywood: 5⅜ × 8¼ × ¼in (135 × 205 × 6mm)
10. Plywood: 4¼ × ¾ × ¼in (108 × 18 × 6mm)
11. Bricks, (16), timber: 1⅞ × 1⅞ × 1⅞in (48 × 48 × 48mm)
12. Wheels, (4), timber: ¾ × 1¾in diameter (18 × 45mm)