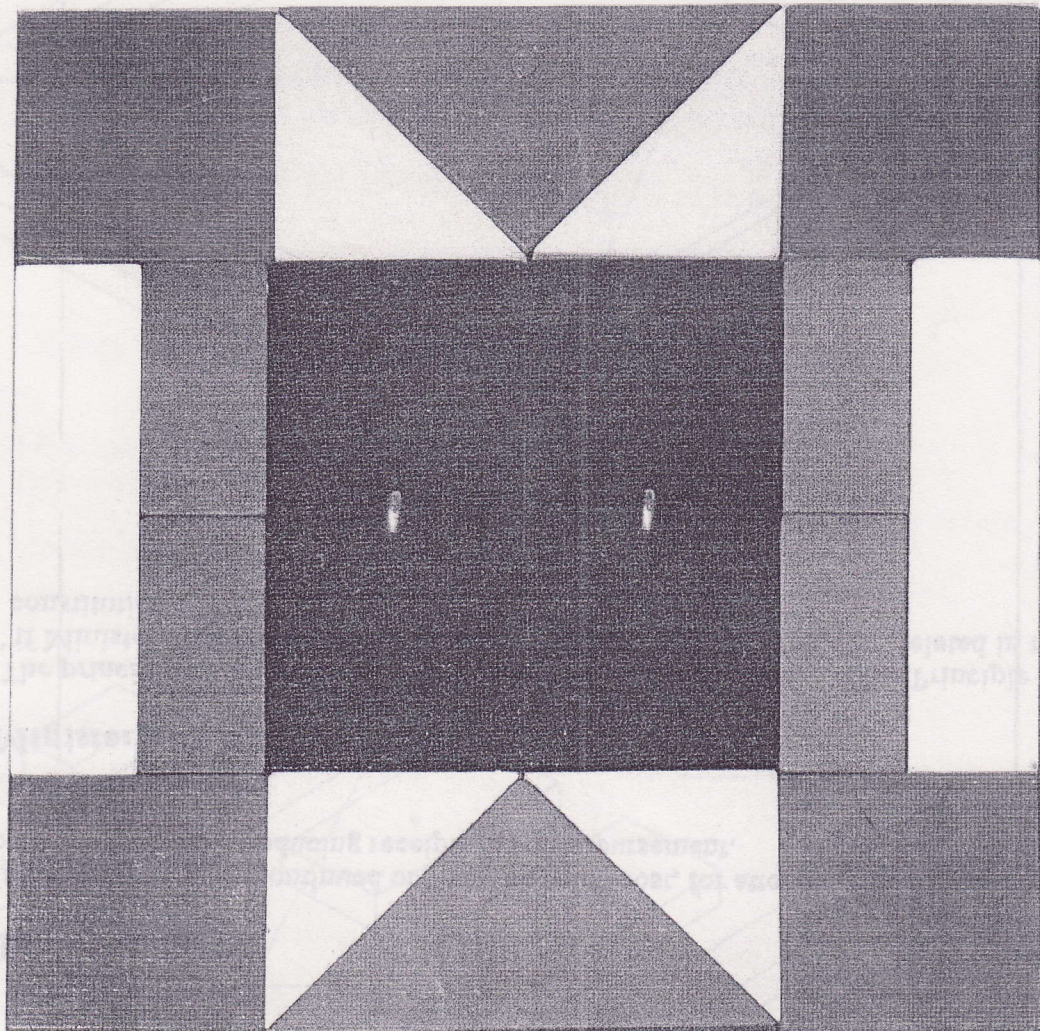


BUILDING BLOCKS IN BOX

This toy is easily made with the basic tools and, depending on how confident you feel, the size, shape and quantity of the building blocks can be varied to any combination.



A mosaic of building bricks in their box.

DIAGRAM 1 (page 22)

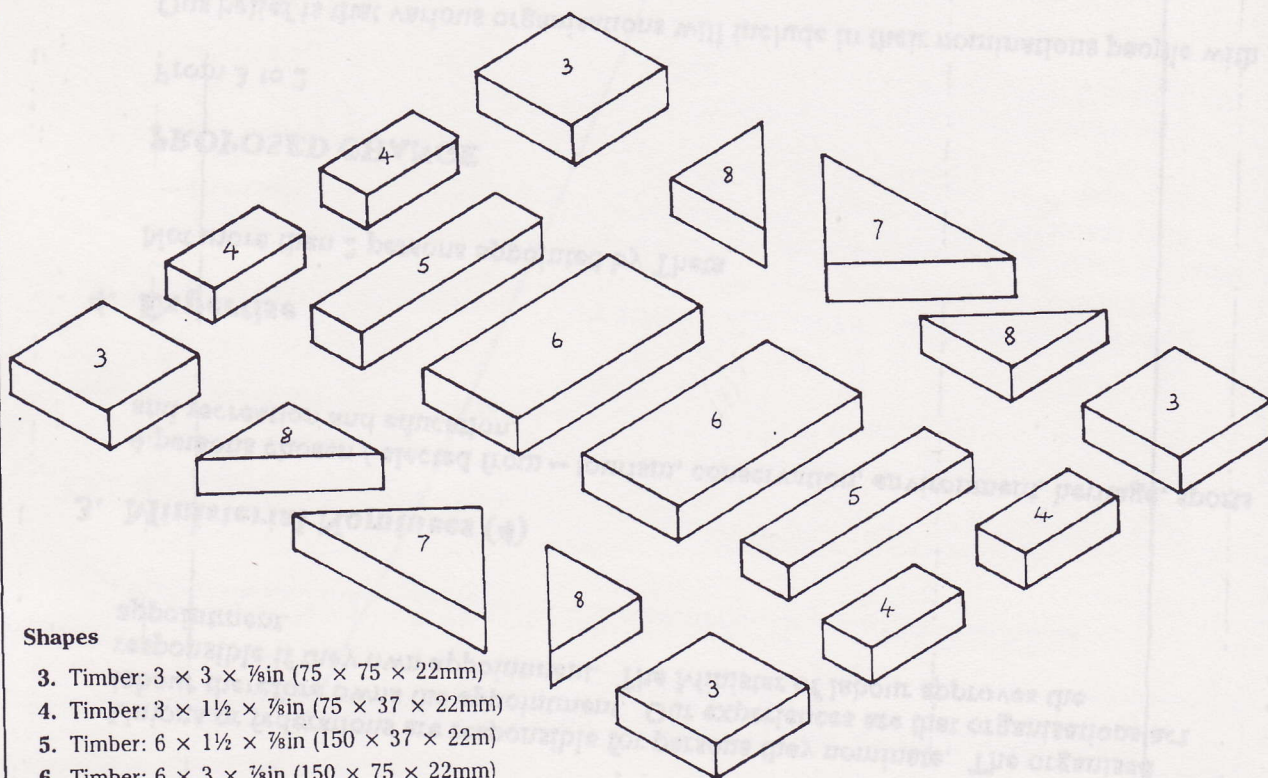
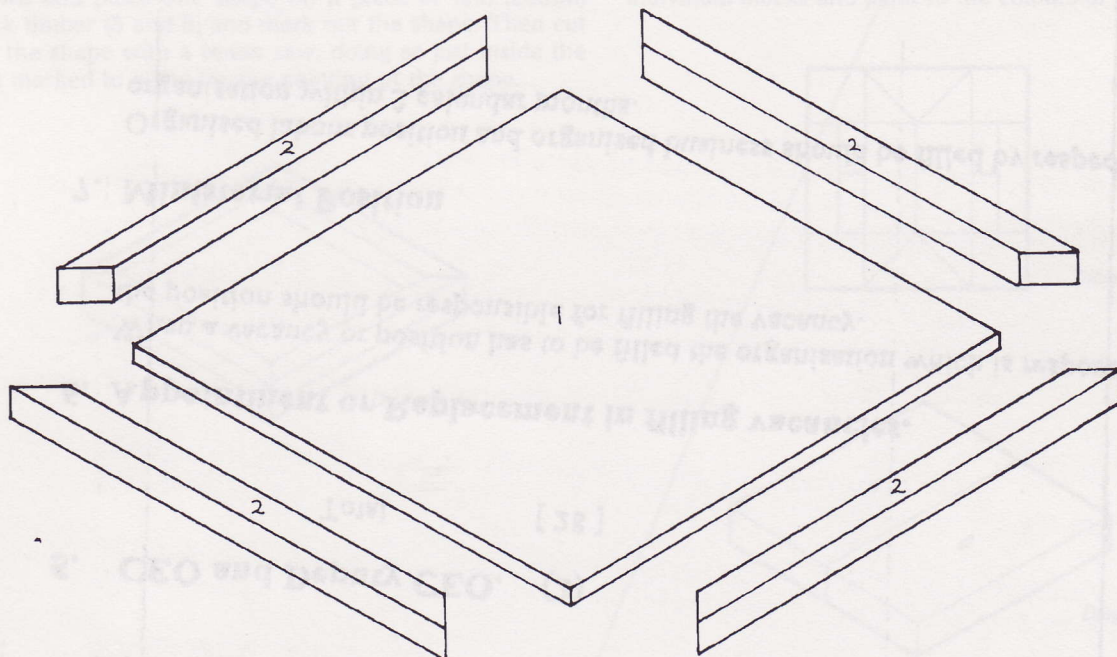
The box. Make the box from the chipboard base (1) and the four pieces of timber (2). Each piece of timber for the sides (2) has a mitre cut on each end, as this gives a better looking finish to the box.

After the mitres have been cut on each of the sides, assemble the sides on the base. The sides should be flush with the outside edges of the base, and be perfectly square. This can be done by checking the two diagonal measurements. When this is achieved, glue and screw each side into position.

MATERIALS FOR BUILDING BLOCKS IN BOX

Box

1. Base, chipboard: $13\frac{3}{4} \times 13\frac{3}{4} \times \frac{1}{2}$ in ($350 \times 350 \times 12$ mm)
2. Sides, timber: $13\frac{3}{4} \times \frac{7}{8} \times \frac{3}{4}$ in ($350 \times 22 \times 22$ mm)



Shapes

3. Timber: $3 \times 3 \times \frac{3}{8}$ in ($75 \times 75 \times 22$ mm)
 4. Timber: $3 \times 1\frac{1}{2} \times \frac{3}{8}$ in ($75 \times 37 \times 22$ mm)
 5. Timber: $6 \times 1\frac{1}{2} \times \frac{3}{8}$ in ($150 \times 37 \times 22$ mm)
 6. Timber: $6 \times 3 \times \frac{3}{8}$ in ($150 \times 75 \times 22$ mm)
 7. Timber triangle: $6 \times 3 \times \frac{3}{8}$ in ($150 \times 75 \times 22$ mm)
 8. Timber triangle: $3 \times 3 \times \frac{3}{8}$ in ($75 \times 75 \times 22$ mm)
- Large-headed $\frac{1}{2}$ in (12mm) brass pins (2)

DIAGRAM 2

The building blocks. The shape of the blocks:-
First mark these out on a piece of paper measuring the same as the inside of the box. In this way, the number and shape of the blocks can be arranged to be as simple or as complicated as you wish. Cut the paper into the shapes drawn and place one shape on a piece of $\frac{3}{8}$ in (22mm) thick timber (3 and 8) and mark out the shape. Then cut out the shape with a tenon saw, doing so just inside the line marked to allow for the painting of the shape.

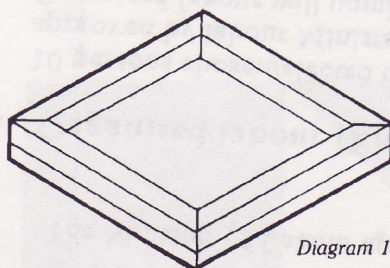


Diagram 1

DIAGRAM 3

Of the shapes to be used, choose a shape or a matching pair of shapes and hammer a large headed brass pin into the centre of the shape. This allows the shape to be pulled easily out of the box.

Using a fine grade sandpaper, sand down the box and individual blocks and paint to the colours of your choice.

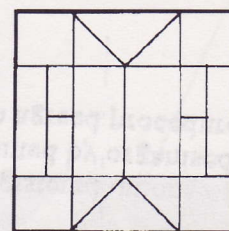


Diagram 2

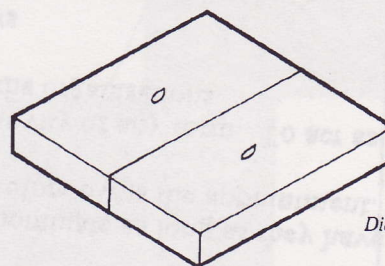


Diagram 3