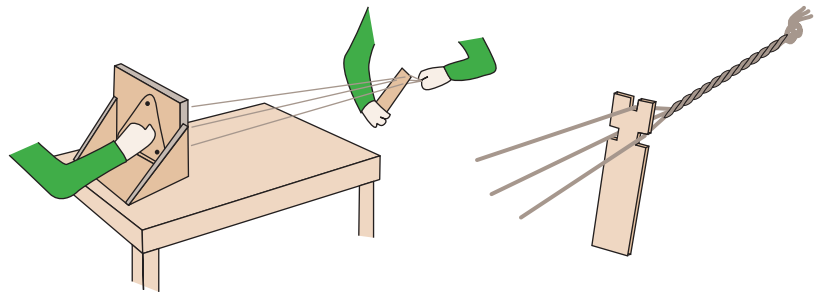
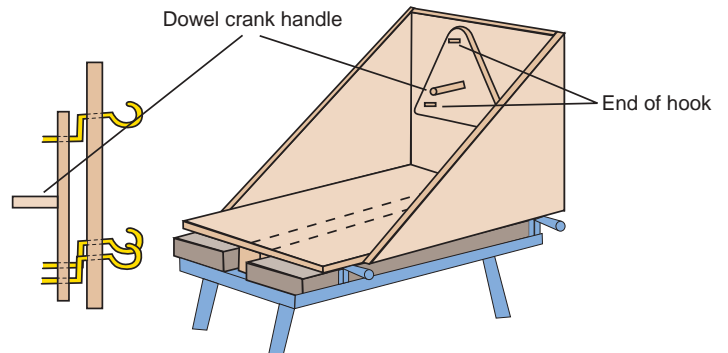


Rope Making

This simple rope-making machine is made of 20 mm plywood. The hooks are made from steel tent pegs, which are cranked approximately 40 mm. The hooks should have a fixing device on the end so that the triangular piece of wood does not come off the hooks (a small nut glued to the end of the hook is sufficient). The machine can either be clamped to a table or if a piece of wood (50 mm x 50 mm) is fixed to the underside of the base, it can be clamped into a workmate



We recommend using *Homebase* three ply garden twine as this will make a nice soft rope suitable for skipping or for practising tying knots (coloured wool is added to give a more attractive rope). Six strands of twine/wool are fed onto the hooks – two of each per hook – and then tied off at the end.



Length of 50 x 50 mm wood fixed to underside for clamping in a work-mate. Alternatively, this may be left off and machine can then be clamped to a sturdy table.

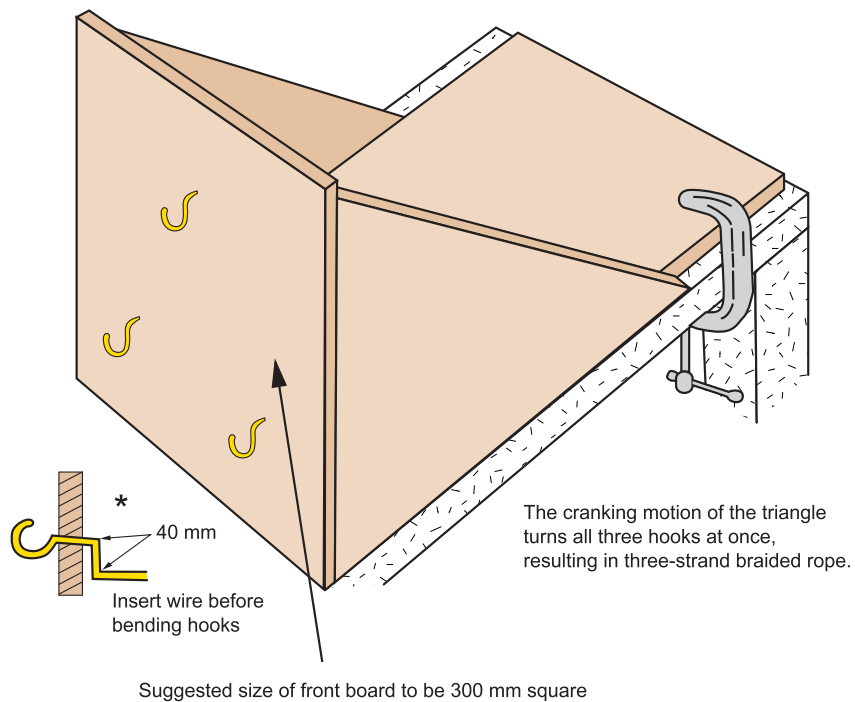
A simple paddle key is made from thinner (12 mm) plywood with three notches cut out at one end. The paddle is placed inside the three lines of twine/wool so that the knotted end is behind it, keeping the

three strands of twine/wool taught while the handle is rotated in a clockwise direction (as viewed from the back of the machine).

The three stands of twine/wool will turn separately and when they have been twisted sufficiently the paddle should be moved slowly towards the machine. The rope will then form itself behind the paddle.

Slight tension should be kept on the twine/wool at all times and the paddle should be kept as close a possible to the completed rope.

N.B.
For a smoother rope, do not over-twist the pairs of twine before they are joined together.. (Practice makes perfect)



When the rope is completed remove it from the hooks and tie off the end. The rope may now be whipped for a neater finish.

* Crank size up to 40 mm — allow for 60 mm throw on triangle when in use.

Rope Making

Step 1 Making the handle mechanism

Cut out an equilateral triangular piece of wood, each side approximately 200 mm long. Round off the corners to ensure a smooth finish. Drill a hole in the centre for the dowel handle. Glue the dowel in position so that the end is flush with the back of the wood. This will have a lot of handling (excuse the pun!) and should be made very secure.

Place this piece of wood onto the inside of the front board so that the two bottom corners are equidistant from the side walls of the machine and the top point is just below the top of the front board. Keeping both pieces of wood firmly together, drill 3 holes through both pieces. They should be approximately 25 mm in from the edge of each corner. The holes should only be slightly bigger than the thickness of the tent peg used for the hooks, otherwise there will be too much play and the handle will not turn smoothly

Step 2 Making the hooks

Use approximately 160 mm of wire tent peg. Place in a vice and, using a hacksaw, score a line 30 mm from one end. Make a 90° bend at this point. Reposition the peg and score another line, on the opposite side of the peg, 40 mm from the outside of the first bend. Make another 90° bend to form the finished crank.

Put the three cranked pegs in the prepared holes in the front board and place the triangular handle onto the 30 mm short ends. Glue a small 'stopping' fixing to the end of each peg, using 'Araldite' or similar glue.

When the glue has dried, use a 'mole' wrench or similar tool to form the hooks. File all cut-off ends of the wire pegs to leave a smooth finish.

