

Rope Making Machine

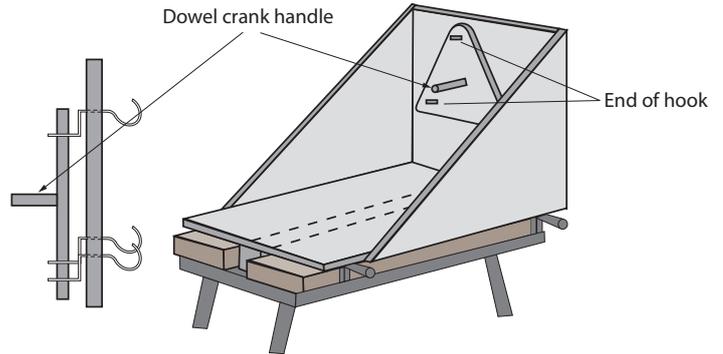
Making the Machine

This simple rope-making machine is made from 18 mm plywood.

The machine is approximately 300 mm wide, 300 mm high and 500 mm long.

Steel tent pegs are cut down to make the 160 mm long rods that are used for the hooks.

The machine can either be clamped to a table or if a piece of wood is screwed to the underside of the base, it can be clamped to a workmate.



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

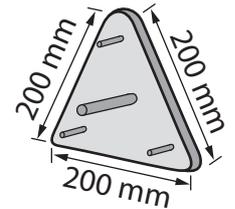
The handle is an equilateral triangular piece of 18 mm plywood, each side approximately 200 mm long with the corners rounded off.

Drill a hole in the centre for the dowel handle and glue it in position so that the end is flush with the back of the triangle.

Place the triangle into the inside of the front of the machine so that the two bottom corners are equidistant from the side walls and the top point is just below the top of the front board.

Hold the triangle firmly against the front board and drill 3 holes through both pieces, approximately 25 mm from the edge of each corner.

The holes should only be a fraction bigger than the thickness of the tent pegs used for the hooks.



Place the 160 mm long rod in a vice and, using a hacksaw, score a line 30 mm from the end.

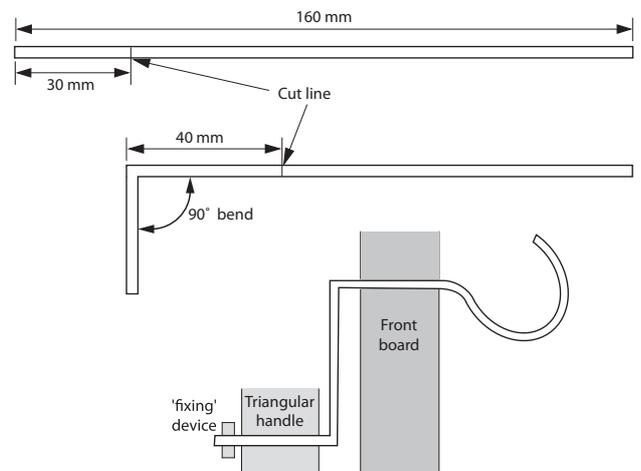
Make a 90 degree bend at this point.

Reposition the peg in the vice and score another line, on the opposite side of the rod, 40 mm from the outside of the first bend.

Make another 90 degree bend to form the finished cranks.

Place the 30 mm end of each crank into the triangular handle and secure it with suitable device glued to the end.

When it is dry, push the three long ends into the holes of the front board and use a mole wrench or suitable tool to form the hook.



Rope Making

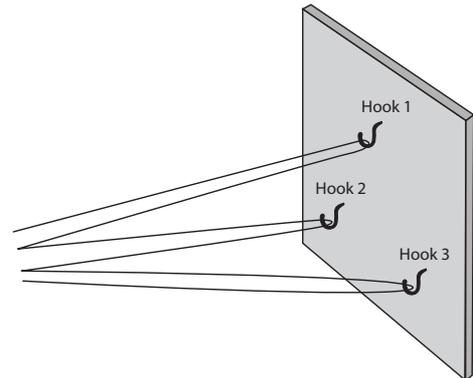
Making a rope is easier with three people:

- (A) = The person making the rope.
 - (B) = Someone to turn the handle.
 - (C) = The person in charge.
-

(A) decides what colour wool they would like in their rope.

(A) holds tightly to one end of the twine.

- (C) then feed the twine round hook 1 and back to A
- feed the twine round hook 2 and back to A
- feed the twine round hook 3 and back to A.
- repeat these three steps with the wool.



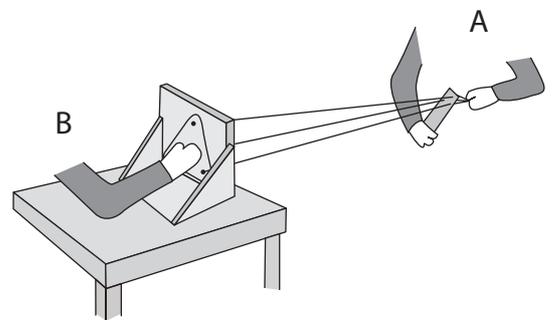
Tie all 6 strands together in a knot and give it to (A) to hold.

Place the paddle inside the three lines of twine/wool, pushing it tight up against the knot to keep the tension on the strands.

(B) turns the handle and the three strands twist separately. They will not automatically twist together into one rope until there is enough 'twist' in each of the three stands.

(The three twisted strands should have a 'barber's pole' look).

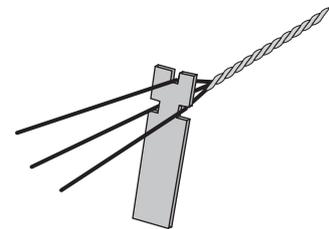
You need to take hold of the loose twine/wool at the end, making sure that (A) is holding the paddle only. The paddle is moved slowly away from the knot. The rope should start to twist together on its own.



If it doesn't then it needs more twist in it.

(A) continues to move slowly forward while you keep the tension on the rope but allow it to turn round.

(B) keeps turning the handle until the paddle gets to the hooks.



You remove the completed rope from the hooks and tie a knot in the ends.
