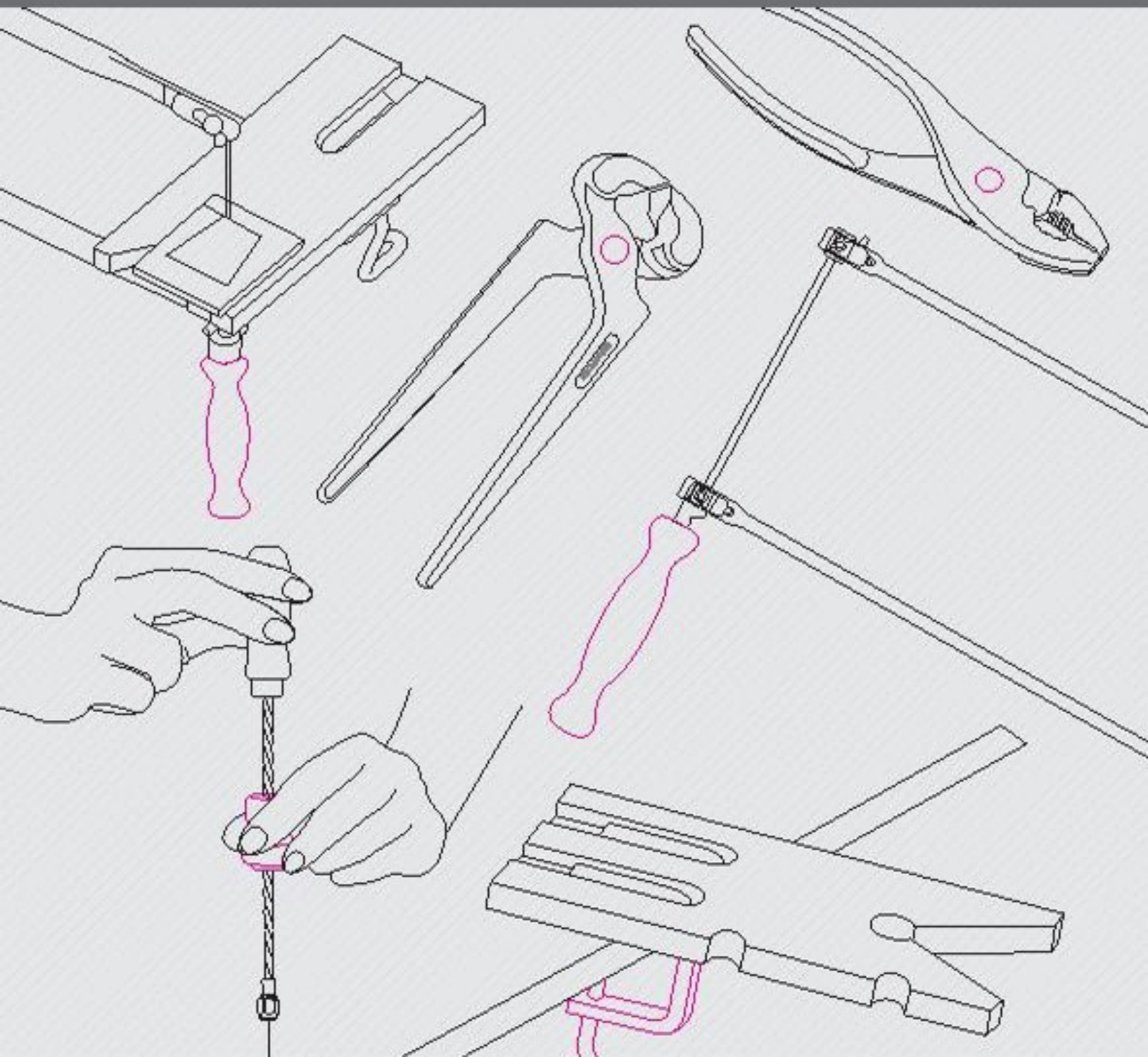
IPKA
TOYS & TOOLS

FRETWORK



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IPKA FRETWORK TOOLS - from Starter Kit to Expert Tools!

The Starter Kit (GB2010) is a perfect kit for beginners. Thanks to it's extensive equipment, this Fretwork kit is suitable for children (9 and up) and everything they want to create. The Expert Kit (GB1010) is perfect for experts and those who want to make professional wooden crafts.

INSTRUCTIONS

You need a solid wooden worktable, with 90cm height and 30 mm thick.

The pattern can be transfered on plywood using carbon paper or sticking it on the plywood.

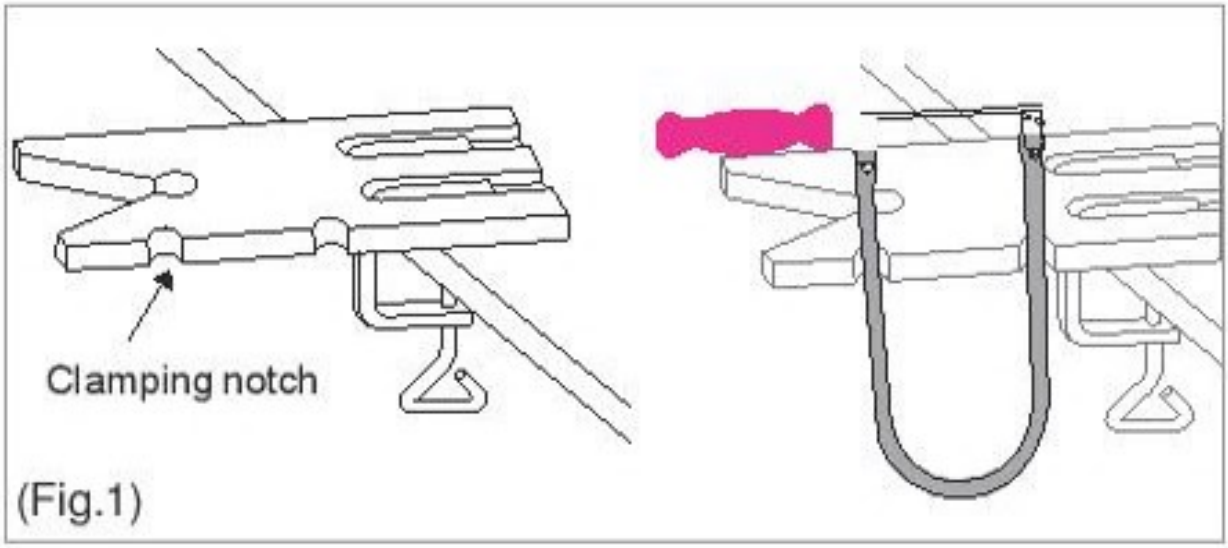
We are cutting on a V-shaped rest table that helps us holding a piece of wood. Another very important task of the rest table is to protect a worktable. The rest table must be firmly attached to the worktable so that it is not moving.

NOTE: We should lubricate the saw blade, so that the fretsaw runs better. To do this, we could use a piece of an old candle or piece of soap.

NOTE: Before we clamp the saw blade, we must clean it. We must clean also both clamping spots on the arc. This must be done because we lubricate the fretsaw. Lubricants and wood dust are collected at the clamping spots. Then, we cannot screw wing nuts sufficiently and the saw blade would slip out.

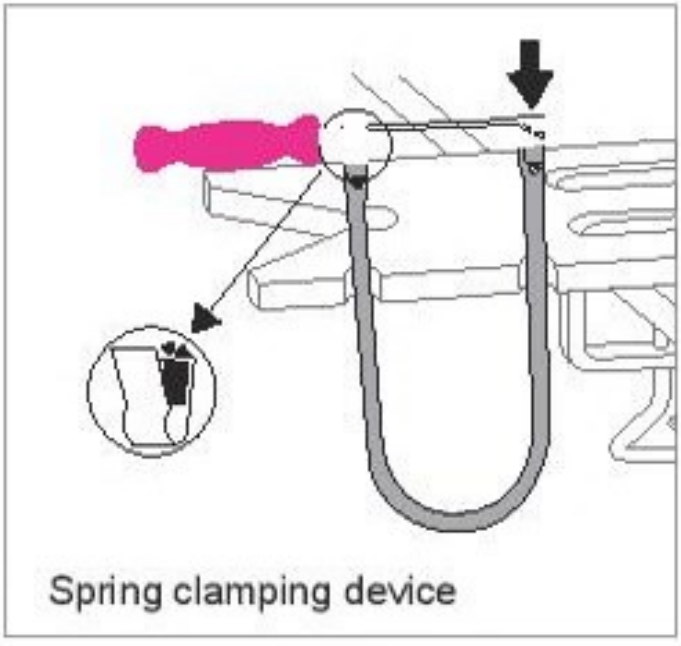
BLADE INSTALLATION

Push the end of the frame opposite to the handle against the table edge.(Fig.1)



(Fig.1)

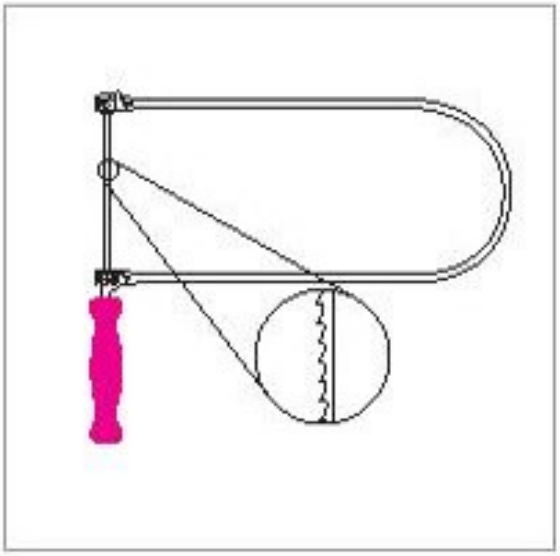
So, you can fix the blade very easily with your free hand. (Fig.2)



(Fig.2)

The saw blade must be clamped properly. That is, teeth must point downward to the handle as we can see in the figure. This way, the fretsaw cuts wood when it is pulled down. (Fig.3)

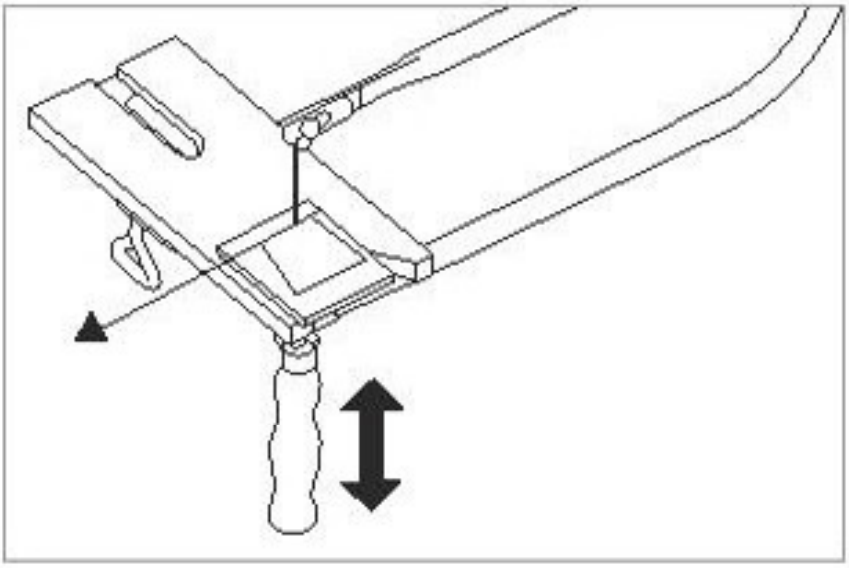
(Fig.3)



If it is too hard to do with bare fingers, you can use the supplied spanner to tighten the wing screw. (Fig.4)

(Fig.4)

When we are sawing, We are moving the fretsaw in the direction up and down while in a forward direction, we only push slightly. (Fig.5)
Because of the push, teeth cut wood and the fretsaw moves forward slowly. If we push stronger, we would saw faster. But it is harder to follow the line then.

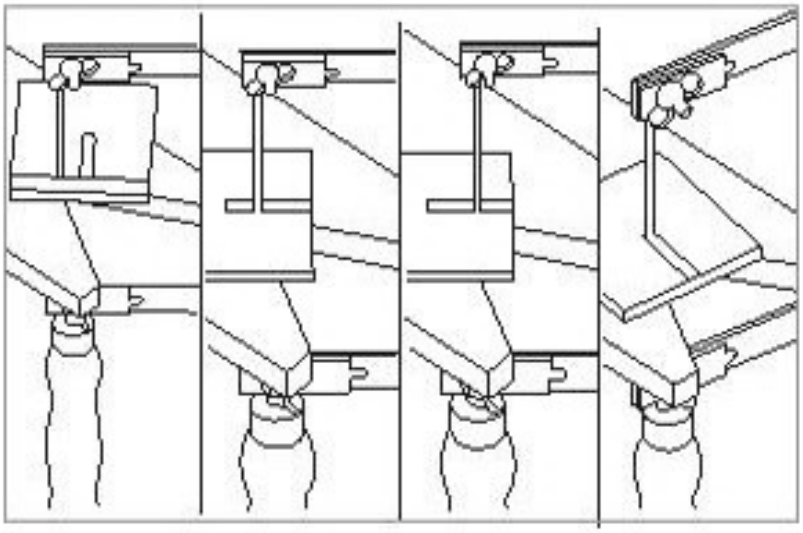


(Fig.5)

To follow a curve, we are sawing continuosly as described. At the same time, we turn the fretsaw or the work piece slowly. We must see the line that we follow. This is why a right-hander saws in the counter- clockwise and left-hander in the clockwise direction.

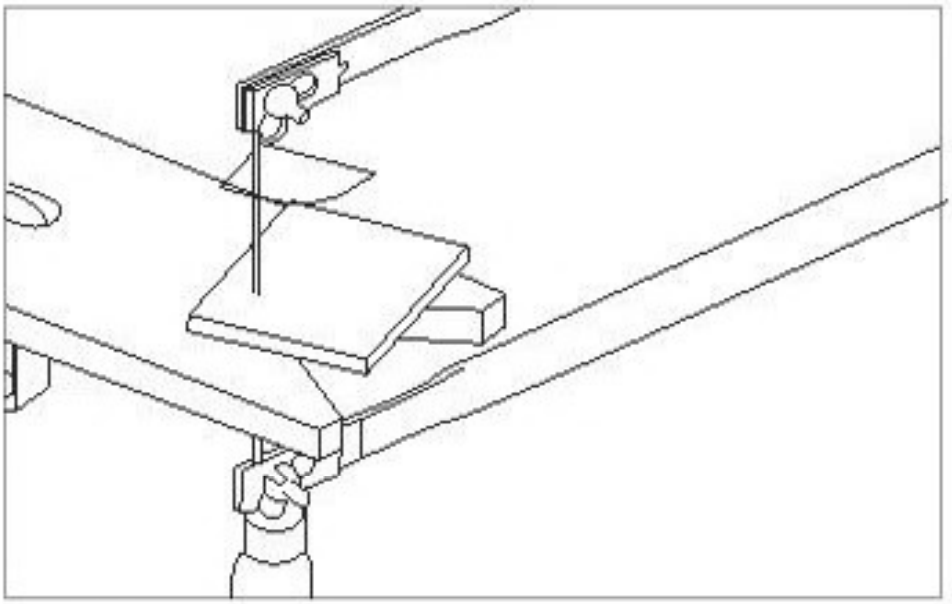
Saw dust accumulates on the work piece and we must blow it away continually. We approach to a corner slowly. In the corner, we keep on swinging up and down, but we stop pushing the fretsaw forward. During that, we are turning the fretsaw in a new direction. Once the saw blade is aligned in a new direction, we start to push forward again.

The model is assembled with joints that must be cut precisely. Indeed, the more precisely we cut the joints, the easier is to assemble the model. The joints are made in four steps. First, we cut the piece off without any slots. In a second step, we cut the nearest edge toward us. We take the fretsaw out of the rift and cut the other edge of the joint. In final step we cut the bottom of the joint. (Fig.6)



(Fig.6)

The holes are made so that we drill a small hole some where near the line. Through the hole, we insert the saw blade and clamp it. Then, we cut the hole off. Finally, we unclamp the saw blade to release the cut piece. (Fig.7)

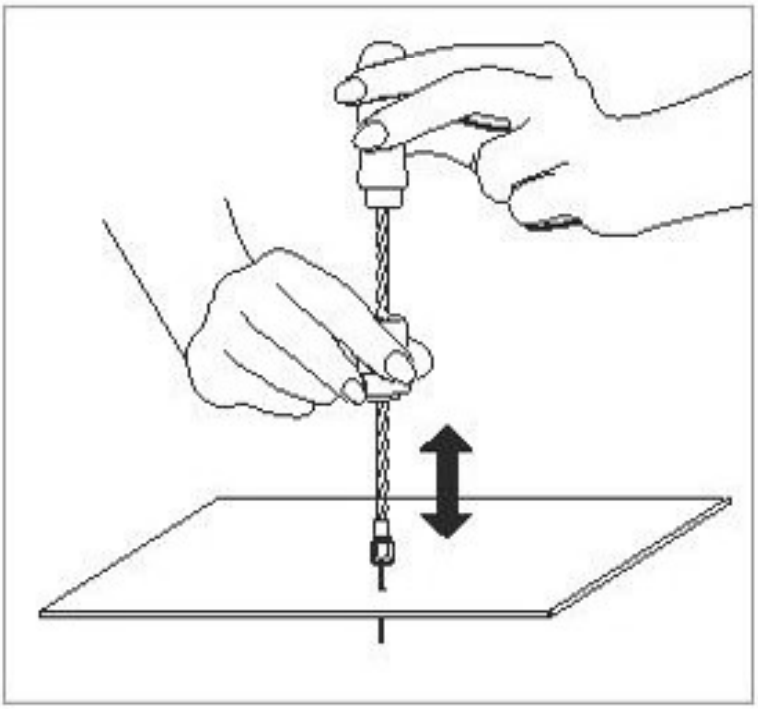


(Fig.7)

DRILLING

You can use a hand drill or an awl for drilling. Place the bit's tip where you want to cut a hole, making sure the hand drill is perfectly perpendicular to the work surface. Pulling up and down on the knurled plunger causes the body of the hand drill to spin.

Use a piece of scrap wood to drill into if you are going to be going through the wood . This will keep your workbench from being damaged. (Fig.8)

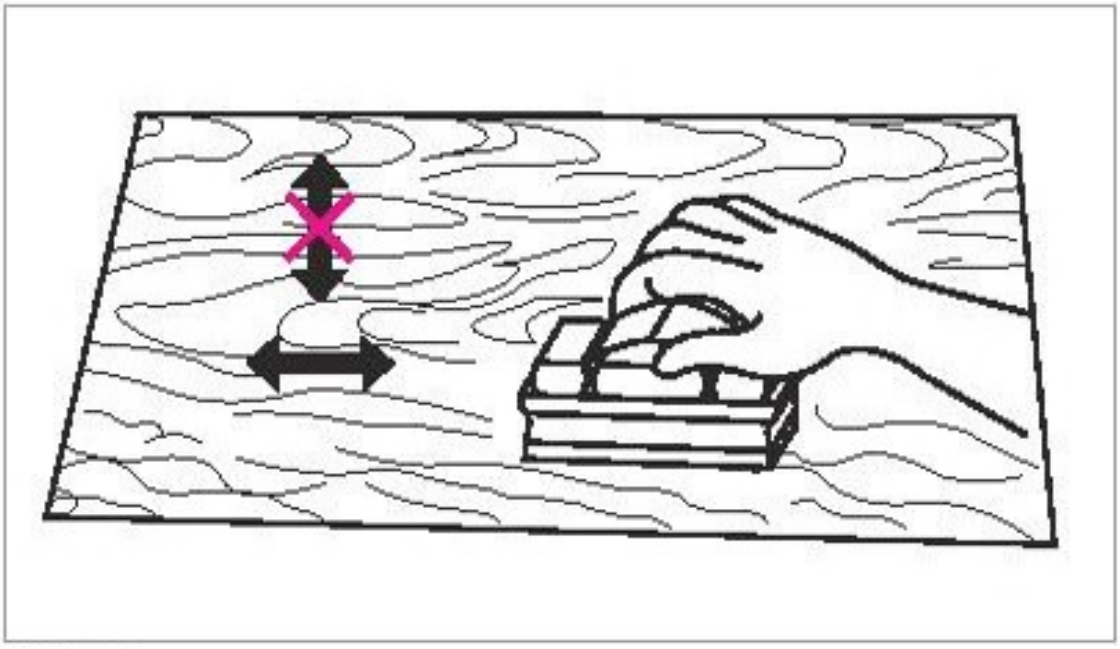


(Fig.8)

SANDING

Once your fretwork piece is cut out, it is time to sand the entire piece. Using fine sandpaper, gently sand each surface. Always make sure to sand in the same direction as the grain, rather than against the grain. (Fig.9)

Once you are happy with the sanding, it is time to finish off your project. You can use stain or varnish and let the beauty of the wood show clearly or paint as desired. Once your project is finished, you can sit back and enjoy all the compliments.



(Fig.9)