

Bamboo water pipes

Bamboo has many uses in our homes, such as for poles, gutters, furniture and mats. Yet not many farmers cultivate it and usually it just grows wild. Bamboo can also be used to make excellent low-cost water pipes.

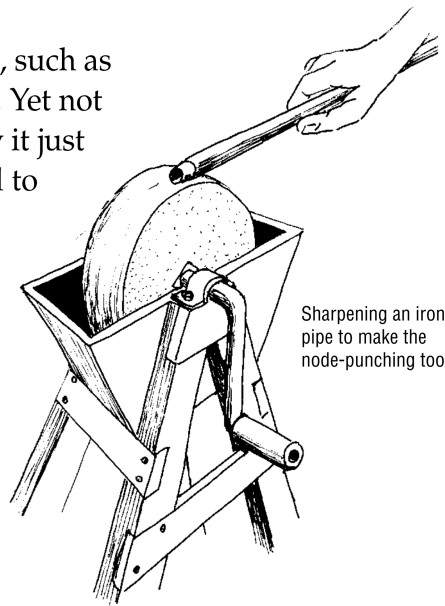
Use straight, freshly cut bamboo poles for pipes as they are less likely to split and the nodes are easier to remove. They should be at least 7cm across at the small end.

Removing the nodes

You will need to make a special tool to remove the little walls at every node inside the bamboo. Use several straight iron pipes, at least 3m long, of different diameters (thicknesses). The thinnest should be about 1.5cm diameter. Sharpen the end of each iron pipe with a hacksaw or grinding wheel. Using the thinnest pipe, push it through each node in the bamboo – you may need to use a hammer. Then use the next size of pipe and continue until all the nodes have been removed.

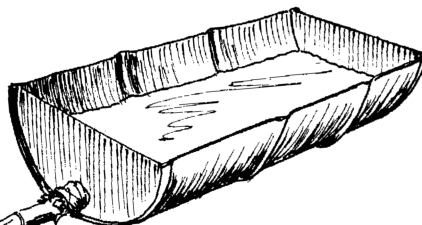
With a 3m iron pipe you will be able to make bamboo pipes that are 6m long by pushing the pipe in from both ends.

Once the nodes are removed and before using the bamboo as pipes, it is



Sharpening an iron pipe to make the node-punching tool

important to remove the sap and starch. This is done by soaking the pipes in flowing water for four weeks. Tie the poles in bundles and weight them down with rocks.



Half a large metal drum can be used as a funnel to pour water into bamboo piping. You may need a short length of metal or plastic piping to connect this.

Preserving bamboo

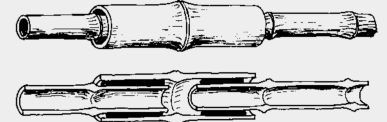
Bamboo pipes can last up to five years as long as they do not come into contact with termites or fungi. You can preserve them for longer by first soaking the poles in a solution of one part boric acid, one part borax and 40 parts water for one hour. Occasionally flushing the pipes with water containing small levels of chlorine can also help to preserve their useful life.

Always avoid direct contact with the soil by using supports. Paint the supports with old engine oil or tar to preserve them effectively. If the pipes are not carrying drinking water, paint them as well.

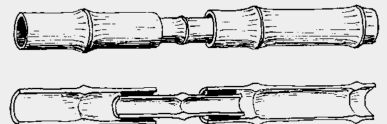
Joining pipes

There are a number of ways to join bamboo pipes together:

- Simply push one pole into the end of a slightly thicker pole.
- Scrape away and trim one end very carefully until it will fit into another pole.
- Use a short length of thicker bamboo as a socket and push both pipes into this.



- Use a narrow piece of bamboo and push both pipes over this. (This method restricts the water flow, however.)



- Wind a piece of tyre inner tube tightly over the joint and tie into place with rope or wire.

- Make a bandage from strips of old sacking and use pitch or tar to make this waterproof.



These ideas would allow water from a well, pump or water source to travel a considerable distance to the home or garden.

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Supporting pipes

