Simple Soap Cutter

I've had this thing sitting in the garage for a year now and forgot about it. Last month I discovered it again and decided to finish it off and give it a test run. The idea is not one of my mine, I can remember watching a YouTube video a few years back. The guy using it, was cutting plain, non textured tops so he didn't have to bother about messing up the top, he just grabbed one log after another and pushed them through his much large cutter. They fell neatly onto the table top and he pushed them out as a single log after cutting. He was moving very fast and cut a lot of logs in no time at all. I love simple ideas and I particularly liked this one.

I found the video of the 'North Shore Soap Factory in Hawaii'.
This is where I saw their version and got the idea of making something a little more simplified.
http://www.youtube.com/watch?v=5aRQOQQboZc

I used hardwood, the frame is actually made from tomato garden stakes. I found the hardwood stakes at my local nursery and only cost a couple of dollars. I measured up where the holes would have to be and drilled them out. Keep the drill holes small as possible. This will help prevent the wire pulling back through the smaller drill holes after the metal collar has been squeezed hard onto the wire ends.

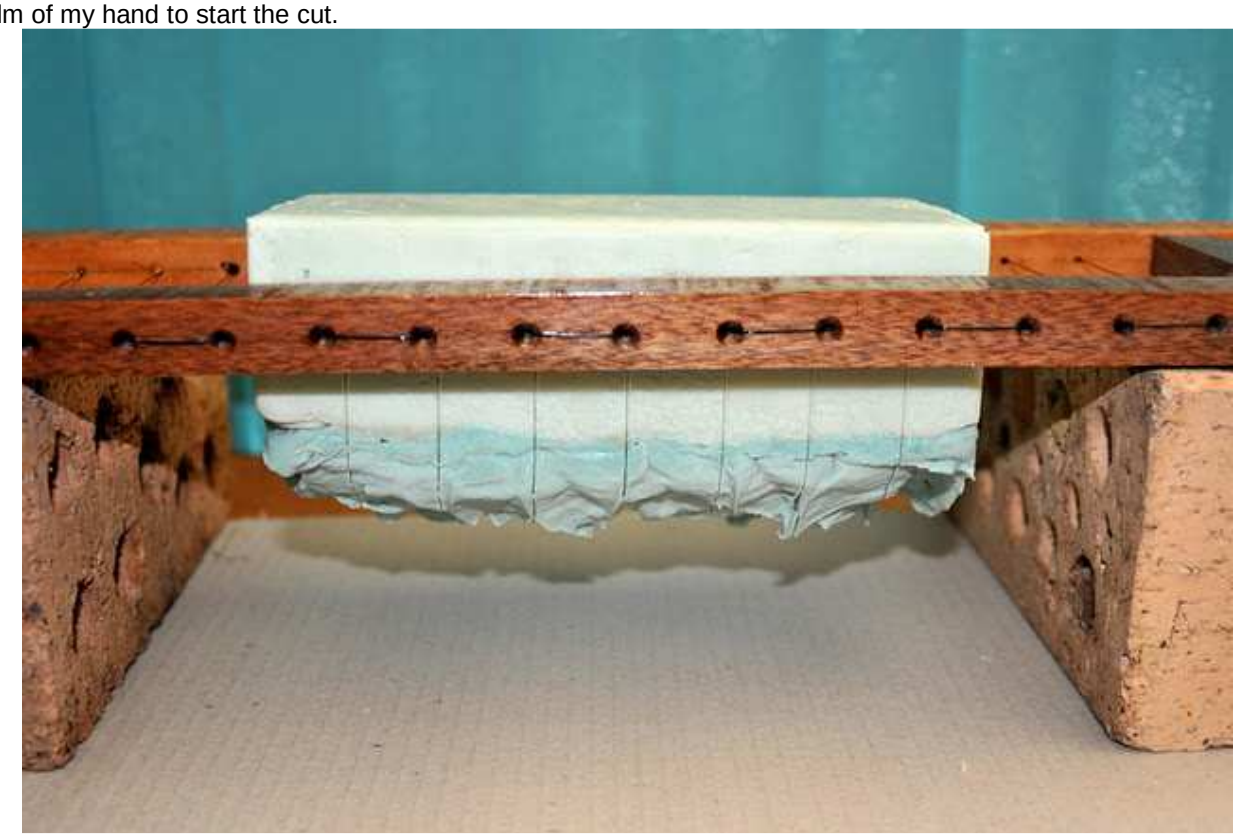
I learned from my first attempt that using a single piece of wire is not a good idea. When it broke you have to restring the complete cutter. Instead of using a single length of wire I decided to cut the wires into lengths just long enough to thread into one hole, then along the back of the wood and into the other hole. I then run the piece of wire back to the other side where I started. This is like a U shape. I clamp off one end then pulling the other end taunt with another set of long nose pliers I clamp that end using the other hand. This keeps the wire taunt. Now when a string breaks I will only have to replace part of it.

I thought about using a row of guitar tensioning screws but I didn't want all that extra work and I wanted to keep the costs low.
When squeezing the brass/metal collars onto the wire I had another pair of pliers pulling on the wire to make it taunt, then I squeezed the collar closed. Tricky for one person so if someone else can do the tension bit while another crimps the collar then it would make life a bit easier.

The metal beads can be lead fishing sinkers, I used them to stop the metal wire cutting into the wood. In fact I didn't use any beads when I made my second soap cutter and the wires didn't pull through the holes.
I left some of the wooden frame long enough so as to sit on top of two house bricks.
I have three different sized log moulds and this cutter fits all of them.

This first photo shows the cutter sitting on top of the two bricks and the 8 bar log ready to rock-n-roll.

Because this soap has a textured top I cut it upside down so I don't damage the textured top. This first stage I pushed with the palm of my hand to start the cut.

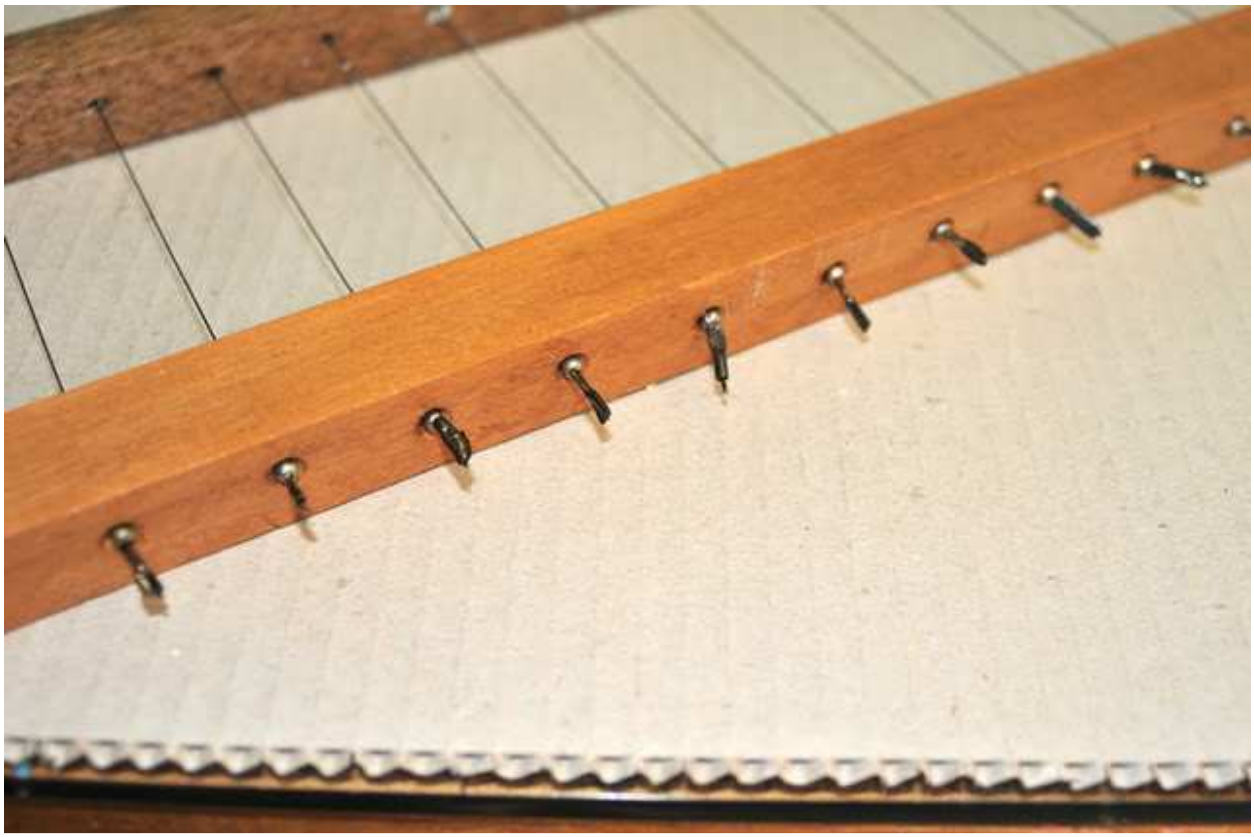


I now use the flat side of a piece of wood to push all the way down to the base. I have also placed something under the soap so when it drops it doesn't damage the top of the soap.

When you push with the flat side of the wood it doesn't quite cut all the way through. You need to turn the piece of wood on its side and push again. This will now cut all the way through the log. The wood is about one inch thick.

Eight nice size bars all cut smoothly.

Here you can see how I added the small metal beads to stop the crimped end from slipping back through. These don't need to be metal beads. I'm sure even small glass beads would hold ok or even wooden one. You just need something to stop the wire pulling the crimped ends through the hole in the wood. Keeping the hole small is also another good tip.



These are my crimpers, they squeeze a lot firmer than a normal pair of pliers. I thread the end of the wire through the small metal tubing (collar) then I use a separate pair of long nose pliers to pull the wire taunt, then I hold the end of the wire with the pliers and roll them a little to make it really taunt. With the other hand I then crimp the wire hard. Voila! Its done. I give it a few extra squeezes along the tubing just to make sure.

I bought this crimping tool about 30 years ago at a fishing shop. I used this tool to squeeze tight the small metal tubes which you thread the ends of the wire through.

The cutter is perfect for me because I don't sell soap and it was cheap to make. But even if I did sell soap and had a production line I think I could move a lot of soap in a short time. Its the old 'KISS' principal in action eh?

You can design your own cutter to the same length of the log mould or log size you make.

This is the fishing wire leader (fishing trace wire) I used. It is less than 1 mm thick. You can buy it in various sizes at your local fishing supplies store.

This photo shows how I have burnt off the nylon coating, leaving just the bare wire now. You can give it clean up with some steel wool or fine emery paper..
You could maybe even try it without burning off the nylon outside layer. I just thought the wire would have a better ‘bite’ on the soap if it was bared.

You can see the 7 strands of twisted wires which make up this single strand of wire.