



Basic Papermaking Equipment.

by [Kiteman](#) on September 13, 2010

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Happiness is a shed full of power tools.

I have quite a bit of spare time at the moment - if you need help around the site, or with a project, feel free to contact me.

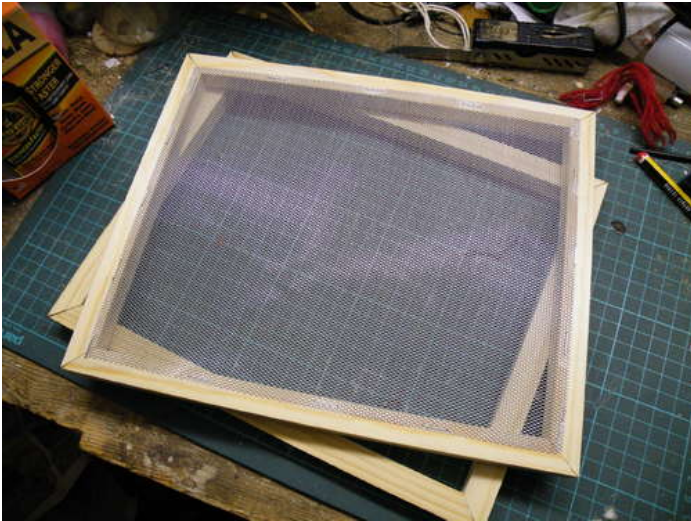
Intro: Basic Papermaking Equipment.

People have been making paper for thousands of years, by hand or machine.

Turning growing plants into useful paper is somewhere between precise science and a black art, and frequently involves strange smells and odd stains, making it the original "mad science" (in fact, getting the secret of papermaking out of China was one of the earliest cases of industrial espionage...).

"Proper" papermaking equipment costs hundreds of pounds, but you can get perfectly acceptable results for under a fiver.

(Watch this space for a full papermaking instructable in the next couple of weeks)



Step 1: Materials and tools.

To make the deckle and mold, I used:

- 15x15mm timber (a 2400mm length from B&Q cost £1.98)
- Aluminium body-repair mesh (a sheet from my local independent car-spares shop cost £1.85)
- Staples & staple gun
- General wood-working tools - pencil, ruler, saw*, sander
- Glue (I used Gorilla Glue)
- Bungees and scrap timber for clamping.

*I have used a mitre kit to make more accurate corners.



Step 2: Measure twice...

I made this equipment to match the size of the mesh I had available.

Notice that the wooden frame is larger than the mesh, so that the edge of the mesh lies along the middle of the timber section.

Using the mitre kit, I lopped of the end of the timber at 45°, and then measured and marked along the centre of the timber.

Don't forget to turn the timber over for every other cut, so that the angles match the corners.

You don't have to make your corners like this, just go with whatever joint matches your skill and equipment. If you can do dove-tail joints, go for it.

I cut two identically-sized frames. One will take the mesh, and become the mold, the other will rest on top of the mesh, and become the deckle.

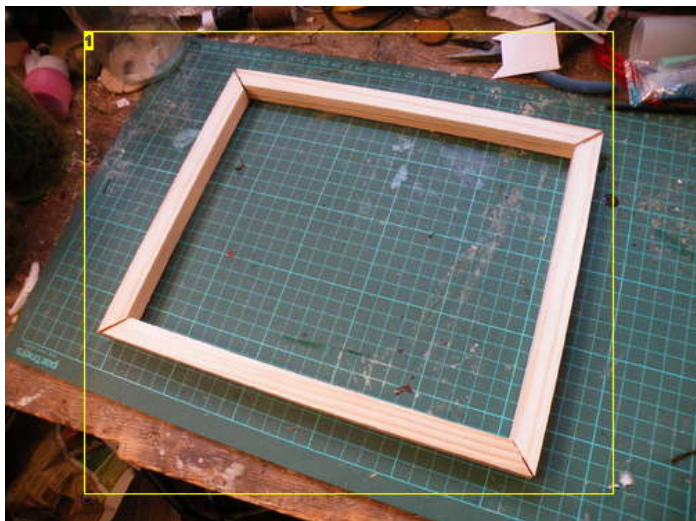


Image Notes

1. Laid out roughly



Image Notes

1. Aluminium mesh laid on to check size.

Step 3: Construction.

I normally use screws and/or ordinary wood-glue on wooden projects, but this equipment is going to get dunked underwater on a regular basis.

So, I'm taking the claims of the packet at face-value, and using Gorilla Glue to fix the timber together. At each joint, I wet one face with a wet sponge, and smeared a thin layer of Gorilla Glue on the other with a scrap of wood.

To clamp the joints, I adapted the Spanish Windlass slightly, and wrapped the frames in bungee cords, with extra scrap timber wedged in place to increase the tension.

(Two hours pass slowly)

Once the glue was cured, I used an ordinary stapler to fix the mesh to one frame, with a few taps from a hammer to make sure the staple was flush with the mesh.

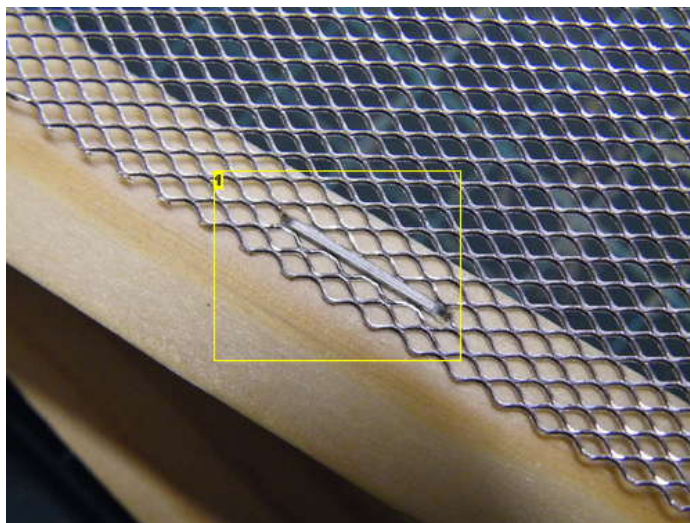
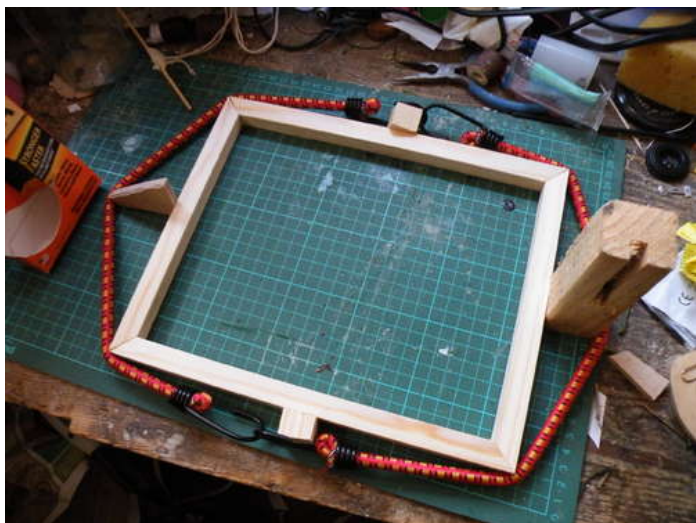
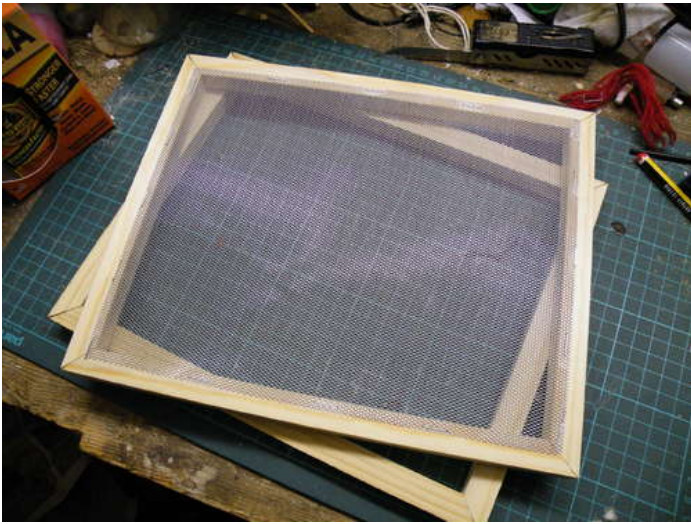


Image Notes

1. Just an ordinary staple.



Step 4: Finishing

To make the frame more pleasant to hold, I rounded the edges slightly with sandpaper.

You could give your frame a coat of marine varnish, but I just gave mine a coat of sanding sealer - the best way to stop water damage to the frame is to dry it properly between uses.

Put your deckle and mold together with a *vat* (I'm using a plastic storage box) and some non-woven cloths, and you are ready to start producing hand-made paper as soon as your pulp is ready.

For that, you'll have to check my next large-scale project.

