Carpenter Museum 2023 Workshop Series:
Paper Making and Decoration Workshop Handout

Definitions and techniques:

Pulp: blended fibers
Slurry: pulp and water mixture that the mould will get dipped in
Pulling: act of making paper because you are pulling the deckle through the slurry
Mould and Deckle: The mould is the bottom part that has a frame, usually wood, with some kind of screening stretched over it. The deckle is the top part and is a frame of the same size as the mould. - can be done with just a mould.
Flax: a plant that can be woven into linen and which was an early material to make paper.
Wove Paper: Hand-made wove paper was first produced by using a wooden mold that contained a finely-woven brass vellum (wire cloth), upon which the paper pulp was applied and dried, creating a smooth, uniform surface - this was started in early Chinese paper making and then made popular in europe by James Whatman in the early 1700s. Benjamin franklin brought it over to the United States around the 1760s.
Watermarks: a faint design made in some paper during manufacture that is visible when held against the light and typically identifies the maker.
Embossing: the practice of creating a raised design or text on the surface of paper

Timeline:

Writing has been done on a range of materials including papyrus and parchment (sheepskin) before paper like we think of today.

Some time between 140 BC and 86 BC - the first examples of paper were made from what seem to be hemp waste in water, washed, soaked, and beaten to a pulp. A paper mold, probably a sieve of coarsely woven cloth stretched in a four-sided bamboo frame, was used to dip the fiber slurry from the vat and hold it for drying. Eventually, tree bark, bamboo, and other plant fibers were used in addition to hemp.paper making later spread throughout Asia.

8th century AD - Paper is brought into Damascus, Egypt, and Morocco by the 10th century - starts to be made out of flax and other substitute fibers - because the are more easily available

12th century - Start to be seen in Spain and Italy - before this Europe is using parchment and vellum

Mid 1400s - rise of the printing press makes paper making more popular in Europe - made out of cotton or linen fiber from rags - sorted, cleaned, and heated in a solution of alkali and then washed and macerated to a pulp. Paper molds were made by hand from parallel lengths of wire laced together together with fine wire or thread ("laid" molds) or from woven wire mesh ("wove" molds).

Until 1690s - most of the paper that was used in America was imported from England

1690s The creation of William Rittenhouse's Paper Mill. This was the first paper making factory in America. The factory was in Germantown, PA because there were also many skilled weavers of linen cloth and many flax fields there!

1790s - Americans started to experiment with materials, as rags were getting scarce. Mathias Koops in England and increasing availability of mechanical wood grinders made wood pulp viable as an option.

19th cent. - the Holyoke Dam was completed across the Connecticut River which started an expansion of mills, and especially paper mills, throughout Massachusetts. This lead to Much of the paper industry's growth happening in New York and New England, particularly Holyoke, Massachusetts, which became known as "The Paper City."

1801 - what would become Crane and Company was started by Zenas Crane in Dalton, Massachusetts - one if if not the first paper-making factory in MA, but not the last

By 1810 - there were some 185 paper mills in the United States including many in MA.

1860s - Paper from pulp was made usable and commercial ready. The first US newspaper to be printed on paper made from ground wood pulp was the edition of the *Boston Weekly Journal.*

1970s - Peter Chambers Print Shop, called Thistle-brae Press Ltd. was started.

General Museum Information:

The Carpenter Museum, named in honor of major benefactors Elsie Carpenter and her son E. Winsor Carpenter, is Rehoboth's local history museum. Our mission is to collect, document, preserve, and share material culture related to the town's history. We connect the Rehoboth community with these artifacts and with local history in general through our exhibits and programming. The Museum provides the wider community with research support, especially in the area of genealogy, and promotes learning about American history through direct experience with objects from the past.

We are open to the public on Tuesdays & Thursdays 1PM - 4PM, and the first Saturday of each month from 1PM - 4PM. Stop by for a guided tour!

Contact us at (508)252-3031 or carpentermuseum@gmail.com and follow us on Facebook and Instagram: @carpentermuseum.

Membership:

Individual memberships are just $15/year. Couple and family memberships are also available. To learn more, contact us, or visit rehobothantiquarian.org/join/.

How to do it Yourself!

Materials:

- Base Material: (Leftover paper scraps/newspaper/cardboard)
- Water
- Deckle and frame - can be made with a picture frame and window screen
- Simple version you can make at home: screen and duct tape
- Tub (large enough to dip the screen into)
- Towel
- Blender
- Sponge or cotton fabric or second towel
- Couching Sheets - any absorbent fabric cut to larger than double your paper size (you will want to be able to hang this up and still have room for two sides covered in newly made paper)
- Decorative materials: (flowers, leaves, paint, glitter, other paper for contrast etc.)
- Place to hang them to dry (hangers)

Process:

1. Tear the base material into small pieces
2. Soak this in water - cover all of it for at least 15 min, though 24-48 hours is best (depending on the material you may want to soak for longer)
3. Blend in blender into a puree (add water to help it blend - double the amount of water)
4. Take out blended base material and give it a light squeeze to take some of the water out - can also strain it - dont hassle too much it will be going back into water
5. Put some of this mixture (pulp) into the tub filled with water (depends on tub size - but 3-5 large handfuls of pulp should be a good start - you want the bin to be milky - the more mixture the thicker your paper will be) - swish it around to loosen the pulp (add more as needed) (you can add some decoration at this stage - glitter/paper/petals/paint)
6. Take your mould and slide it into the water at a 45 degree angle - you want to get under the pulp
7. Pull upwards and shift from side to side to help the fibers settle
8. Tilt to get rid of excess water (remove deckle if using) - (if adding flowers add them here-place them into the pulp where you want them)
9. Tilt carefully onto fabric (fibers side down) and press down
10. sponge off excess water
11. Slowly remove the screen from paper - take your time. (if you don't like how it looks at this stage no worries, just scrape of and dip the deckle again)
12. Press second piece of fabric down with sponge and hands (Can press down with tray)
13. Let sit for a bit
14. Hang to dry over night or until fully dry
15. Remove from fabric- take your time and be careful
16. Lay under heavy books/ other weights to help it lay flat
17. Use as you want!

Decoration style #1: Watermarks
Version 1
Materials and tools:

- Paper making materials
- Stamps - preferably deeply carved ones!

Directions:

1. Make paper as normal
2. After you pull the screen out of the water and flip it press the stamp into the still wet paper (press hard to get a more distinct shape)
3. Dab with cloth carefully

Alternatives: There are more complicated versions of this that you can do including the traditional way which is sewing a piece of wire in the shape of your watermark on the screen that you are using. Sometimes this would be a second screen that was put above the first one before you dip it in the slurry.

Decoration style #2: Dry-Emboss
If you want to add interest to already made paper you can dry emboss it.
Tools/materials:

- Dry paper
- Card stock
- Exacto knife
- Window or shadow box - can use phone
- Pencil
- Paint brushes or other soft, but thin tipped tool

Directions

1. Pick out your design and draw it scrap paper
2. Shift it to the cardstock - use light like window or phone
3. Cut it out of the card stock - be careful
4. Set decorative paper over the cardstock where the cut out is - trace this with the fine tipped tool (take your time to say within the lines)
5. Use paper

Resources and further reading:

General Paper Making
https://www.youtube.com/watch?v=W--hn8NH0ro&t=74s
https://www.youtube.com/watch?v=HmmO5wqNv2s&t=139s

Dry embossing:
https://www.lettering-daily.com/dry-embossing-lettering/

History:
From Rags to (Paper) Riches: Explore Colonial Papermaking
https://philadelphiaencyclopedia.org/essays/paper-and-papermaking/#:~:text=Paper%20was%20generally%20made%20by,in%20the%20early%20nineteenth%20century
Robert C. Williams Museum of Papermaking
https://paper.gatech.edu/early-papermaking