

A FEW OF THE INTERNET SITES WITH MUSSEL INFORMATION

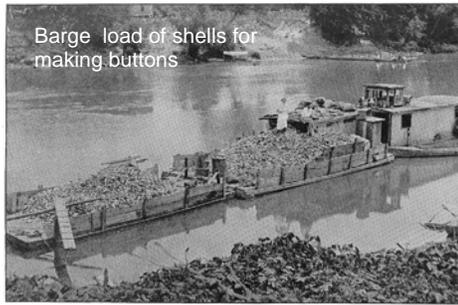
<i>Name of Web Site</i>	<i>Internet Address</i>	<i>Content</i>
Illinois Natural History Survey Mollusk Collection	http://www.inhs.uiuc.edu/cbd/main/collections/mollusk.html	Photos, research, guide book, distribution maps, many useful links
Alabama Mollusks Freshwater	http://fly.hiwaay.net/~dwillis/mussels/alafwsp1.html	Photos, identification, also includes information on marine species and snails
North American Freshwater Mussels, by G. Thomas Watters	http://coa.acnatsci.org/cochnet/acfwmus1.html	Biology, literature citations, identification, collection
Unio Gallery at Southwest Missouri State University	http://courses.smsu.edu/mcb095f/gallery	Photos of glochidia with adaptations that mimic fish prey items and glochidia on fish
U.S. Fish and Wildlife Service	http://midwest.fws.gov/mussels	A wide variety of information on mussels and some additional activities including the ones in this guide
NOVA Online: The Perfect Pearl	http://www.pbs.org/wgbh/nova/pearl/	Cultured Pearl Industry and a lot of other information
National Park Service, Natural Resource Information Fact Sheet	http://www.nps.gov/miss/features/mussels/index.html	Some good photos and comprehensive write-up about mussels

To find information using your Web browser, I recommend you first try searching on the following keywords:

“freshwater mussel”
 Glochidia
 Unionidae
 “Commercial Clamming”
 “Cultured Pearls”
 “Pearl Button”

And of course, utilize the links provided by the sites listed above.

MAKING OF A PEARLY BUTTON – EARLY 1900’S



Barge load of shells for making buttons

FIG. 1.—Barges loaded with shells and two shellers' house-boats, in Arkansas. (See p. 59.)



Sorting Machine

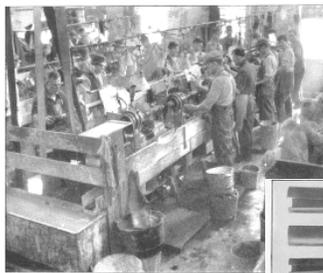
FIG. 2.—Blank classifier for separation of blanks according to thickness. (See p. 61.)

Shell Preparation

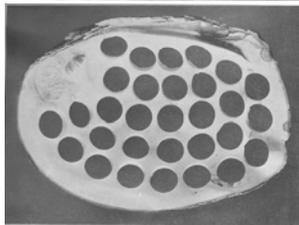
- The shells are soaked in vats of water for weeks to make them tougher and less brittle

Sorting Blanks

- The sorting machine automatically separates the blanks by thickness into five different groups.
- Thick blanks will be used to create fancy buttons.
- Thin blanks will be made into common shape staple buttons.



Lathes

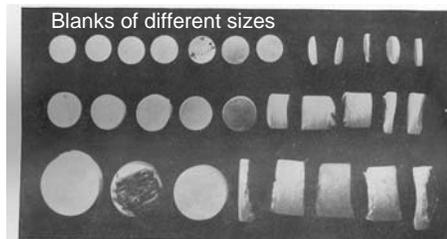


Shell showing pattern of holes drilled to make blanks



FIG. 3.—Various sizes of different drills, one and one-third inch long, and shell from which blanks have been cut. (See p. 71.)

Drills



Blanks of different sizes

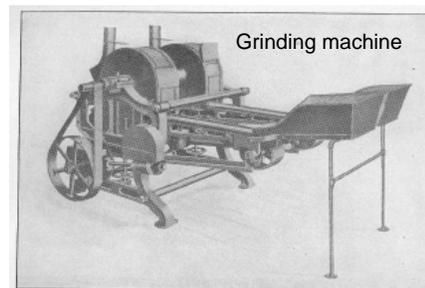
FIG. 4.—Blanks of various sizes and thicknesses as cut from the shell and before submission to the "backing" process. (See p. 74.)

Blank Cutting

- Specially trained men operate lathes (round saws) to cut out as many blanks per shell as possible. Cut blanks, varying in size and grade, fall into buckets below the lathes.

Grinding

- Grinding machine is set for the thickness of the shell.
- The machine's revolving emery wheel grinds off the rough clam shell.



Grinding machine

The belt-grinder employed to remove the backs from blanks and bring them to desired thickness. (See p. 74.)

Facing

- The facing machine's sharp steel chisels round the edges of the blank.
- Depressions are cut into the middle of the blank.

Drilling Machine

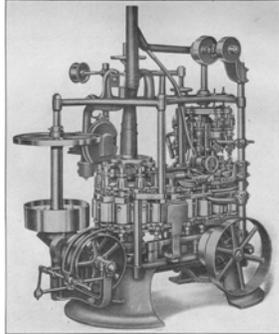


FIG. 1.—A modern automatic machine for shaping and drilling buttons. (See p. 71.)

Drilling

- Sharp steel bits cut holes in the middle of the button.
- The machine can be set to cut two or four holes.

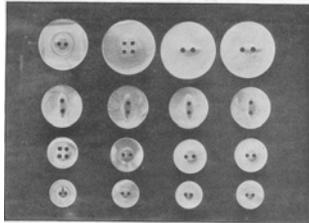
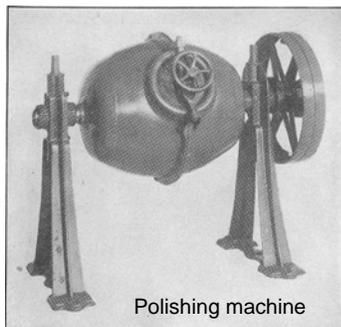


FIG. 2.—Finished buttons of several sizes and patterns. (See p. 71.)

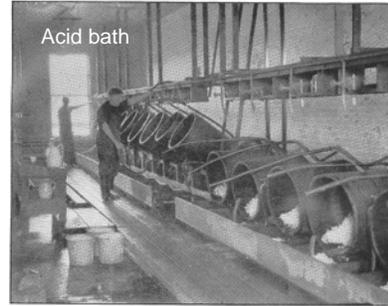
Polishing

- Buttons are combined with a mixture of powdered pumice and water in churns. This mixture is tumbled for 10-12 hours to remove any scratches made by the machines.



Polishing machine

FIG. 3.—The tumbler employed for buffing blanks or buttons. (See p. 74.)



Acid bath

FIG. 4.—The churns, with buttons awaiting polish by the use of acid and steam. Note the handles from which acid solution dips into the churns. (See p. 72.)

- Next the buttons are placed in sulfuric acid baths to strengthen them.
- Then the buttons receive a quick dip in hydrochloric acid to put on the gloss.
- A steam bath follows to remove the acid.
- Finally the buttons are shaken up vigorously in boxes with saw dust to remove any trace of acid and to bring out the shells' luster.

Sorting

- After the buttons are sieved out of the saw dust, they are sent to be sorted.
- "Sharp-eyed, experienced girls" rapidly sort into five grades of button.
- Sorting is based on: luster, color, thickness and shape.

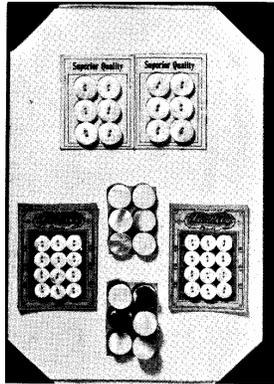


Sorting room

FIG. 5.—The sorting room, in which skillful operators classify buttons into 12 grades. (See p. 72.)

Carding

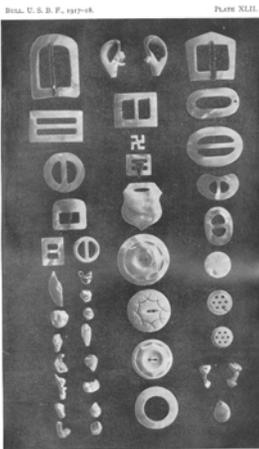
- Carding is done by hand in the homes of local women.
- “Experienced girls” are able to sew 5,000 - 6,000 buttons per day. *



*(In 1906, eight women walked off the job saying they could only earn \$1.70/week. The company said they could earn \$7 if they worked harder. Source: La Crosse Tribune article from 1906)

Boxing

- Cards of buttons are then packed in boxes.
- Each box contains 100-120 dozen buttons in assorted sizes.
- Many of the Wisconsin Pearl Button Company of La Crosse buttons went next door to the Valyu Garment Factory.



Fancy Button Department

- All operations of the machine are done by hand. Only one button at a time can be placed in the machine.

Shell and Mussel Disposal

- Mussel meat was boiled out of the shell and hauled to hog farms until there were complaints that the pork tasted like fish (La Crosse Tribune, 8-9-1959).
- Shell refuse was sometimes ground up for chicken feed or to be used on roads.



FIG. 1.—Small cutting plant and operatives on Mississippi River. (See p. 7a.)

Discarded relics of buttons and shells are sometimes unearthed in the vicinity of former button factories.

Historic photos from the Department of Commerce Bulletin of the United States Bureau of Fisheries, Vol. XXXVI, 1917-1918

Bibliography

- *The Story of My Life by “Billie Button,” Wisconsin Pearl Button Company, La Crosse, Wisconsin, circa 1910-1920.*
- *Business Men at Two Big Local Factories, La Crosse Tribune, 3-16-1906, Page 6.*