## Item: Wood as lye

A washerwoman in the 16th C in England or France would use various types of washing supplies. Items would have included: ash to use in the bucking tub, fullers earth mixed with urine to use on oily/greasy stains, lye made from wood ash to use in wash water, or directly upon spots on clothing.

# Washing Fabric and Clothing in the 16<sup>th</sup> Century

Washing fabric and clothing in the 16<sup>th</sup> century was a hard and time-consuming task. The choice of equipment - which cleaning solvents, buckets, and types of tools were used - depending upon what was to be washed. It is recorded that the Babylonians were making soap around 2800 B.C. and that the Phoenicians knew it around 600 B.C. These early references to soap and soap making were for the use of soap in the cleaning of textile fibers such as wool and cotton in preparation for weaving into cloth. (Gies p.125)

Certainly anyone who could possibly afford to would employ a washerwoman, which was one of the standard jobs for a poor woman. They would have earned their wages well, as it is very laborious and unpleasant work. (Sim, p.59)

Outer clothing was rarely washed. Stains were spot treated. The clothing was hung over a frame then brushed to remove dust and dried sweat. If the clothing smelled bad, it was perfumed by hanging it over burning incense or heated perfume. (Greco et al p. 220)

In the Middle Ages and Renaissance, clean water had to be captured in a cistern, hauled up from a well, carried from a stream or, in some places, gravity fed aqueducts were constructed to create flowing water in a town specifically for laundry. In the picture to the right, each "wash area" has running water available to it so laundry could be done without leaving town. The water flows away from town by means of a system of drains.

In Le Menagier de Paris – 1384-89, there is an article which focused upon cleaning clothing:



Medieval laundry in Arezzo, Italy

...oil or other grease stain, here is the remedy: Take urine and heat it until it is warm. and soak the spot in it for two days, Then without wringing it, compress the part of the cloth with the spot. If the stain is not removed yet...put in more urine with ox gall beaten into it, and do as before, Or you can choose this: Have fuller's earth soaked in Iye and then put on the stain, Let it dry and then rub. If the earth does not come off easily, have it moistened in Iye, let it dry again and rub until it comes off, Or if you do not have fuller's earth, prepare ashes soaked in lye, and put these well-moistened ashes on the spot. Or have very clean chick feathers soaked in really hot water to remove any grease they have clinging to them. Soak them again in clean water, rub the spot well with them, and everything should go away, if there is a stain or fading on the garment of blue cloth, take a sponge, moisten it in clear clean lye press and stroke it over the garment of any other color put very clean lye which has not been poured on any other cloth mixed with ashes on the spot and mixed with ashes on the spot, and allow it to dry. With rubbing, the original color will be restored. To remove stains from garments of silk, satin, camlet, damask, or other material: Soak and wash the stain in verjuice and it will go away. And even if the garment is faded, the color will return, although I am not sure I believe this. Verjuice: Nota, that at the season when fresh verjuice is made one must take a flask of it,

without salt, and store it, or it is useful for removing spits from dresses and bringing back their color, Fresh or old, it is always reliable."(Greco et al, p220)

Streams, pit laundry areas and fountain types of laundry areas worked well for small articles of clothing such as shirts and partlets, but did not lend themselves well to larger items such as



Millet - Lessiveuse A bucking tub

sheets, table clothes and other larger items. These larger item would often be cleaned by a process know as bucking. A "buck tub" was a large tub that stood up on a stand that raised it about a foot from the ground. It had a tap set about an inch above the bottom; a shallow wooden tub was placed under the tap. (Sim, p.52)

.....cover the uppermost yarn with a bucking cloth, and lay therein a peck [about 16 pints] or two (according to the bigness of the tub) of ashes more; then pour into all through the uppermost cloth so much warm water, till the tub can receive no more; and so let it stand all night: the next morning you shall pull out the spigot [peg used to stop hole] of the bucking tub, and let the water therein run into another clean vessel, and as the bucking tub wasteth, so shall you fill it up again with the lye which cometh from the bucking tub, ever observing to make the lye hotter and hotter till it seethe [boil]..... (Markham, p. 162)

## How each material was used in period:

#### Ash – used to make lye.

There were multiple types of ash to be had in the middle ages, Some woods were better than others - ash, apple and pear wood gave a very strong bleaching action. Ash from ferns was used on more delicate linen (Markham, p152). Ash could be used straight in a tub such as a bucking tub or pre-stained through straw and to create lye water that could be added directly to wash water. This was an invaluable resource, which almost everyone had available due to fires burning in the hearth.

Very often [lye] was strengthened by adding bran, stale urine or water in which dung had been steeped....The use of lye survived into the nineteenth century in both cottage and middling households probably because all the constituent materials were household waste products.....Some woods were better than others - ash, apple and pear wood gave a very strong bleaching action. (Sambrook, p.22)

#### How lye was made in period

The lye solution was obtained by placing wood ashes in a bottomless barrel set on a stone slab with a groove and a lip carved in it. The stone in turn rested on a pile of rocks. To prevent the ashes from getting in the solution a layer of straw and small sticks was placed in the barrel then the ashes were put on top. The lye was produced by slowly pouring water over the ashes until a brownish liquid oozed out the bottom of the barrel. This solution of potash lye was collected by allowing it to flow into the groove around the stone slab and drip down into a clay vessel at the lip of the groove. (Sim, p.54)



Photograph circa 1911 by Clifton Johnson

## How I made my lye – the urban approach

I located some wood ash from some friends who were burning the remains of a tree in their back yard. They generously let me have about two pounds of ash. I live in an apartment and had nowhere I could set up a barrel and leach my wood ash. Based upon how the bucking process works, I put the ashes into a large glass container and added water. I then strained the mixture though successively more dense cheesecloth as would happen with it leaching through linen, until almost all of the ash had disappeared. Then I let the lye solution settle over night and, had the yellowish lye that is discussed in the literature.

The best ash for lye is the ash in which all of the wood has been oxidized leaving the light white or graying ashes. The ash I received had larger chucks of material, which were not sufficiently oxidized. I began by straining the ashes through 2 different sized screens to remove the larger chunks.



There are several folk tales about how to tell if your lye is the correct pH. One that is mentioned in several books, suggest placing a raw egg, still



Staining Ashes

Floating Egg

dime is showing, your lye should be strong enough. (Sim, p55) Once I had allowed my lye solution to settle overnight. I had lovely

in its shell, into the lye. If it floats such that an area the size of a

lye which could be used to clean clothing alone or mixed with urine or other useful solutions.



Unsettled lye

Settled lye

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## Appendix A

From Natural Magick (Magiae naturalis) by Giambattista della Porta,

"A Lye to dye the hair." Thus, put Barley Straw into an earthen pot with a great mouth, Feny-Graec. and wild Cumin, mingle between them, Quicklime and Tobacco, made into powder. Then put them upon the Straw before mentioned, and pour on the powders again, I mean by course, one under, the other over, till the whole vessel be full. And when they are thrust close, pour on cold water, and let them stand a whole day. Then open a hole at the bottom, and let the Lye run forth, and with Soap use it for your hair. I shall teach you,

From "Manual of Women in which is contained many and diverse very good recipes" (Manual de mugeres en el qual se contienen muchas y diversas reçeutas muy buenas) Translation of an anonymous 16th century cookbook from Spanish into English.

Lye for washing the head - Half a celemín of vine-shoot ash, and another half (of a celemín) of oak ash, half a pound of burnt and ground-up white argol, another half pound of ground-up sesame, six maravedís of bone ash. Put this all in a pot horizontally and press it well. Add a patcher of water and leave it to rest two or three hours. And then cook it until it is strong, as much as is necessary. Put half a celemín of ash in a colander, pass this lye through it and cover the vessel into which you strained it, so that no vapors can escape. And after straining put with it an escudilla of honey. (maravedí: a coin. escudilla : a small hemispherical cup (used to measure liquid volume)