

# Preservation and Care of Philatelic Materials

## Subsidiary Page 12

### Sizing, Toning Paper, and Determination of Paper Grain

#### Sizing

If a paper has lost its original sizing and has become soft, it will need to be re-sized. This will restore its surface and will lessen, or in some cases remove, brown stains. For sizing, use a large shallow enamelled pan as a sizing bath. The sizing bath should be set into a frame to elevate the pan so that an alcohol lamp can be placed underneath. The sizing bath must be hot. The sheets of paper should be clean and clear, as sizing will not remove markings but will fix them on the paper.

Soak one ounce of pure gelatin overnight in a little more than a quart of water. Heat slowly to 120 degrees F., and keep the solution at this temperature. Strain the solution through a fine sieve. When the sizing is ready to use, a slight stickiness is felt when a drop or two of the sizing is placed between thumb and index finger. If the liquid is too sticky, add water. Size will keep several days if covered.

When the size is ready, pour it into the pan under which a flame has been placed to maintain temperature. Lay one sheet of paper at a time in the hot size. Other sheets can be placed on top of the first and subsequent sheets.

The sheets may be removed from the bath almost immediately unless water stains are to be removed, in which case the sheets should be left in the bath for 10 to 15 minutes. The sheets of paper should be placed between white blotting papers to dry. If the sheets do not dry within a day, the blotting paper should be changed. Fragile sheets of paper should be handled by being placed on a plastic sheet. When dry, light pressing is needed to flatten the paper.

#### Toning Paper

It may be necessary to tone a piece of paper to match other papers. There are several simple techniques. Coffee produces an opaque brownish hue. Tea results in a limpid brown. Permanganate of potash gives a yellowish tone. The latter is very powerful and therefore the solution should be weak. All toning agents are put in the size. Be certain to sample the solution in order to have the correct resulting color of the paper. Unprinted newspaper is best for testing and should be allowed to dry thoroughly in order to judge the resulting color accurately.

#### Determining the Paper Grain

Hold the full sheet of paper lightly with the two opposite ends placed against the palms of the hands, and move the ends against the middle so as to feel its resistance. Then hold the other two ends and test in the same way. There will be least resistance bending with the grain. Another method is to crease the paper in both directions. The crease following the grain will be smooth and tight. A final test may be necessary. Dampen a piece of paper on both sides with a sponge. Let the paper dry. As the paper dries, it will curl in the direction of the grain.