Cleaning and Polishing Brass

Clock weight shells, pendulum bobs, case parts, dials and bezels all become corroded on the surfaces, especially if frequently handled. Cleaning brass is not difficult. Many polish cremes are available and they work well. However, refinishing brass, so that it keeps its shiny appearance for years, requires practice and experience. A brass piece from a lamp was used for the demonstration on this page.

The part is cleaned with detergent and then dipped in muriatic acid for about one minute. Muriatic acid is dilute hydrochloric acid. Using a powerful and dangerous acid like this should only be left to a professional. The acid reacts with the metal oxide, dissolving the oxide into solution. However, it can also react with the metal itself and dissolve it, so the part should be removed after a short time. (Vinegar, or ethanoic acid, works well and is much safer, though results will take more than one minute. Ammonia solution also works well, and it will not react with the metal itself.) Do everything in a well ventilated area.

The acid is removed by rinsing thoroughly in water. The part is dipped into a buffer like sodium bicarbonate solution and then rinsed again thoroughly in water. (A mild base like ammonia solution could also be used in place of the buffer). Apply stripper with a paintbrush and leave for five minutes. Rinse again thoroughly in water.
Brush the surface thoroughly, dipping the part in water with detergent while brushing. A brass wire wheel like this one makes the job easy.

Polishing takes place in two steps. First polish with a cotton wheel using tripoli (a fine abrasive compound). Clean off the residue with lacquer thinner (other solvents can also be used).

Polish the surface to a mirror finish with another cotton wheel using rouge (a very fine abrasive compound). Again, clean off the residue with lacquer thinner.
Darren finishes the job with a layer of lacquer. He used a fine spray of lacquer mixed with some lacquer thinner. For objects which are handled frequently, two layers of lacquer is recommended. Allow the lacquer to dry.

This clock dial pan and bezel have been cleaned and are ready to be polished and lacquered.

These carriage clock parts have been cleaned and polished, and are ready to be lacquered. The next photo shows the clock afterwards.
I would like to thank Darren Wicker and the good folks from Austin Brass for this demonstration. They refinish and repair brass, copper and silver products, such as musical instruments (trumpets, trombones, French horns, etc.), lamps, bed frames, etc. Repairs include removing dents, loosening sticky valves, and soldering broken parts. Please call Darren before you bring or mail musical instruments or other items, so that he can give you directions, or packing instructions.

Mark Headrick