

CAUT Corner

Removing Lacquer from Hammers

By Fred Sturm, RPT **New Mexico Chapter**

Steinway has used lacquer to harden hammers for many years. In the recommended application, the material coats and stiffens the fibers of the hammer, and provides a brighter tone color which can be manipulated relatively easily by needling. The formula used by the Steinway factory and by the Concert and Artist Department is fairly weak, consisting of about 4% solids dissolved in thinner. Two and some-

times three applications are commonly used, the first saturating the hammers, with later applications most often localized to areas that need them. Following this type of procedure, needles can be inserted readily. The hammers are low density to begin with, and the solids from the lacquer can be thought of as filling less than 15% of the space between the fibers.

Sometimes too much lacquer is applied. This can happen when a more

concentrated formula is used, when more than one technician works on the same set of hammers without communication, or for various other reasons. Over-lacquered hammers are very hard, and have little resilience, as a great deal of the space between the fibers has been filled in with solids as opposed to the solids simply coating the fibers. Needles can be inserted only with difficulty, and instead of spreading fibers apart and removing some of the stiffness caused by the lacquer, they simply bore a hole in what has become, essentially, a composite material.

Faced with this situation, many technicians consider that the hammers are ruined and must be replaced. Some try to flush out a portion of the solids by pouring thinner through the hammer felt, letting it run down the hammer tails. I have developed an alternative approach, which, while it doesn't remove every bit of solids from the hammer felt,

removes enough to restore the hammers to a usable condition. This method uses the technique of soaking for a period of time in solvents, mildly agitating occasionally, and then blotting the hammers dry to the extent possible.

In order to soak the hammers, suitable receptacles for the thinner must be obtained. I fashioned four troughs from an empty one gallon thinner can, using tin snips to

> cut it into quarters, and then bending portions of the walls of the can to act as supports for the trays. (See Photo.)

To soak the hammers. in a well-ventilated area remove the action from the keyframe and set it on the bench, tipped over to the front rail. Then swing down into a trough as fill it with lacquer thinacetone. The acetone will

a section of hammers shown in the photo and ner, or with a mixture of lacquer thinner and

enhance the solvent strength of the thinner, and will evaporate more rapidly. It will also create stronger fumes. Cover with aluminum foil (to reduce evaporation and fumes) and move on to the next section with an additional trough. Every few minutes, gently lift an end of each trough up and down to agitate the thinner from side to side. After about 20 minutes, raise each section of hammers in turn and blot the hammers with paper towels to remove as much thinner as possible.

A second or even third application of thinner may be needed for hammers that have been extremely overlacquered. After drying overnight, the hammers should be lightly filed to remove the outer crust of solids that will accumulate on the surface of the hammers. From this point, the hammers may be needled to even out tone, or re-lacquered if necessary.

