

## **TOOLS: DEVELOPMENT AND USE**

This chapter lists the most common tools to be found in the violin makers workshop. The tools reflect the tradition of the craft of violin making. Several are replaced by power tools today.

### **Rules for Tools**

- Safety must be considered first; then work can begin.  
**Every workshop must have a first aid kit.**
- As far as possible, the tool should only be used for its original purpose.
- The largest tool should be used that fits the work.
- Specialized tools make difficult tasks easy.
- Fine tools stay sharp and perform smoothly.
- A cheap tool is a bad investment. It adjusts poorly and dulls quickly.
- Sharp tools are safest; they perform consistently.
- Dull tools are dangerous; they require undue force.
- Edged tools should cut going away from the body.
- Edged tools should be laid on the workbench with the cutting edges pointing away from the user to avoid accidents.
- Files and scrapers should be kept separately to prevent dulling. They should not touch each other as is often seen in metal tool-boxes.
- Workplaces should always be kept clean.
- A plane should never rest on its sole; this will dull the blade.
- Tools should be returned to their place on tool boards or cabinets after use. They should not pile up on the workbench!
- If there is more than one person working in a shop, the individual, personal tools can be marked with color. Shop tools can also be marked so that they can be returned to the correct cabinet/ tool board.

### **Shop Safety**

Woodworking holds many hazards. Safety must always be taken into consideration. Tools should be kept razor-sharp; a dull tool can slip and is therefore dangerous.

Do not work when overly tired; that is when mistakes are made. Trying to get just one more thing finished will cause twice as much work the next day! Plus, it is very difficult to remove bloodstains from wood!

If slips do occur, know how to control bleeding, and keep a first aid kit on hand. It is also advisable to spend the time to take a first-aid course; a first aid kit does no good without knowledge of how to use the contents.. Keep an emergency number (usually 911, but not always) posted near the phone.

Work with another person when appropriate. Many procedures are easier with two sets of hands; some may actually be dangerous if attempted alone. Always anticipate potential dangers.

Violinmaking uses relatively few power tools, compared to general woodworking, but be aware that any power tool can be dangerous. A bandsaw that can cut hardwood has no problem with a finger. A bending iron can cause serious burns. Even a glue pot can cause serious damage if it spills.

Besides cutting injuries, be aware of the potential for electrical injuries and burns.

The varnish room presents additional dangers. Many ingredients are toxic and should not touch the skin. Fumes should not be breathed. Be alert for poisoning and inhalation injuries. If any dizziness or 'feeling odd' occurs, leave the room. Eyewash facilities and water for rinsing the skin should be available.

In the United States, OSHA regulations require that MDSS (material data service sheets) for any potentially dangerous substances be kept in the workshop. This is a legal requirement if there are employees. The telephone numbers for Poison Control and for Emergency Dispatch should be posted. The normal emergency number in the US is 911, but its use is not universal.

Above all, use common sense and work safely.

