

GLOSSARY

- Abrasives** Materials used in violin making to polish or smooth varnish. Pumice stone, fine; rottenstone, finer; Tripoli, finest. Micromesh™, ultra fine.
- Air wood** Archaic name for maple or sycamore.
- Alemannic school** Violinmaking in the 17th century in the southern Black Forest and in Switzerland.
- Aliquot strings** Sympathetic strings of steel wire positioned beneath the bowed strings. They vibrate on their own while the upper strings are bowed (*Viola d'amoré*, etc.). Usually tuned diatonic. See *Sympathetic strings*.
- Alum** A crystalized chemical salt containing an alkali metal, used as a mordant to fix dyes to a substrate. Pliny called it *alumen* and said one form, *salsugoterrae*, occurred naturally in the earth. Another form, called *schistos*, occurred as threads on the surface of some stones. Types of alum include potash alum, soda alum, chrome alum, and ammonium alum. Potash alum ($K_2SO_4 \cdot Al_2(SO_4)_3$) is the type most often used as a mordant. See *Varnish* chapter.
- Anhydrous** Without water. Used to describe compounds from which all water has been removed, as, for example, anhydrous ethyl alcohol.
- Anisotropic** Said of a material that exhibits different physical properties in different directions; as, wood is anisotropic because its radial, tangential, and cross-sectional properties differ.
- Antinode** The point or line in a vibrating body that has maximum motion or amplitude. See also *Node*.
- Arching** Curvature of back and top.
- Axial** Along the long axis; thus, regarding trees, longitudinally.
- Axial parenchyma** Long vertical food transfer and storage cells that lie in the longitudinal axis of the tree.
- Back** The lower or back plate of the violin; the plate opposite the top or belly. Usually, but not always, made of maple.
- Balsam** An aromatic, oily, and resinous substance which exudes from certain plants either spontaneously or by incision. In addition to a volatile oil, balsams usually contain benzoic and cinnamic acid.
- Bass bar** In the violin, a long narrow beam of spruce, glued to the underside of the top, which runs longitudinally and slightly askew to the grain. This beam lies directly under the bass foot of the bridge, where it provides support and transmits sound vibrations to the top. In Italian it is called the *catena*, meaning 'chain', because it connects the upper and lower parts of the plates.
- Bee sting** The black strip of the purfling that extends into the corner beyond the mitered joint.
- Beeswax (bee's-wax)** Wax produced by the honeybee; not to be confused with paraffin wax, which is petroleum-based and inferior for violinmaking purposes.
- Belly** The upper plate of a violin, also called the top. It is generally made of spruce.
- Bird's-eye maple** Maple with a growth aberration. Small (usually 3-6mm) decorative circular aberrations occur in the fibers, possibly caused by conical indentations in the outer annual rings so that successive growth produces layers of the same distinctive pattern. The distinctive pattern is especially evident in tangential and veneer cuttings and is often sought as an attractive figure. Occurs in several species of maple and in Europe as well as in the United States.
- Black light** Invisible light that lies at the near end of the ultraviolet region just beyond visible violet, being about 360 millimicrons in wavelength, which has the property to cause fluorescent materials to emit visible light (i.e., to fluoresce) and produce photochemical reactions in other materials. Used in the examination of varnishes and in varnish drying cabinets.
- Bleeding** The unwanted mingling and spreading of one color or varnish type into another, causing a blotchy or mottled appearance.
- Blocks** Structural components of the violin. Good violins have six blocks: the upper block, into which the neck is mortised; the lower block, into which the end pin is let; and the four corner blocks, which provide the joining points for the ribs in the center bouts.