

Preface

This book was born after ten years of research and production of oil varnishes and wax polish in the classical violin making sector.

In reality there are no varnishes produced specifically for application on musical instruments, instead there can be an appropriate choice of materials and varnishing procedures that are suitable for use on musical instruments.

Raw materials must primarily respond to a philological question, using only those natural materials that were available (and still are) from 700 until before the advent of synthetic oil varnishes.

Linseed oil, rosin, hard African amber and copal, coloring plants, metal salts, waxes and fine abrasives for the production of polish are the materials covered in this book.

The varnish to be used in stringed instruments must have the following characteristics: elasticity, resistance, transparency, color fastness to light.

Rosin, although hardened by the addition of metal salts, never becomes a resistant resin and also often maintains the serious defect of being sticky, which is why in my varnishing system it is never used in the final layers which instead are obtained with amber and hard copal varnishes (Madagascar copal).

Despite having these defects, rosin has the great advantage of easily binding to the mordant salts, obtaining the so-called resin products.

The mordant salt can itself give the color to the resin (for example a nice brown with iron sulphate) or fix coloring substances to itself (Zinc sulphate).

These pages will cover: Thickening and clarification of crude linseed oil, heat-treatment of amber and copal from Madagascar, the procedure for obtaining metal resins, the extraction of coloring materials, the firing of varnishes and their drafting and production of excellent polish based on natural waxes.

What are the topics that will not be covered?

Protein, mineral or chemical bases (or worse the combination of the three), colored lacquers, dyes that are not lightfast.

An oil varnish is far more resistant and protective than a protein-based primer which is instead easily attacked by humidity and consequently molds.

Contrary to what is said, an oil varnish does not penetrate too deeply and does not "dampen" the vibration of the sound.

The "Mineral Grounds" should be called by their name, or "Grain Filler" which are products formulated by: varnish diluted with powdery excipients that are used to save time and money in a valuable job should not be used at all.

Finally, the Grain Fillers, being made up of inert powdered materials, concur to remove transparency from the wood.

Therefore the Grain Filler should not be considered as a specific product to be used as a primer, but as a cheaper and faster product suitable for use in carpentry.

The color must be obtained by varnishing, the use of chemicals (potassium silicate / sodium nitrite) jeopardizes the durability of the varnish layers.

The coloring lacquers are semi-transparent pigments and therefore affect the transparency of the varnish, similar to the inert materials used in grain fillers.

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