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CERA COLLA

By J. E. McLennan

For those of us who wish to prepare the wood surface of violins as suggested by Pete Molenaar (1) and as used by early painters in preparing their wood panels, the cosmetics industry offers better ways of achieving beeswax emulsions with water than that suggested by the above author. Mayer (2) gives a similar procedure to Molenaar and implies that the wax soap obtained requires further processing. Of recipes given in Henley (3) considerable adaptation would be needed.

George Frank (4) in a book on Wood Finishing gives a recipe for certain success that came from the cosmetics industry,

The method is as follows:

Bring 500ml of water to the boil and add 2ml Triethanolamine. In another vessel melt together 30g refined beeswax and 24g stearic acid. Pour the latter into the former when a creamy emulsion forms immediately.

To prepare the "Cera Colla" of the ancients a solution of animal glue (or fish glue) is mixed with the wax emulsion. The proportions are the decision of the maker: 30g of glue would make a 1:1 mixture. The quantity of water can be increased if desired to assist application.

It may be good practice to rub the Cera Colla into the wood surface with the fingers and when dry to burnish with a suitable material e.g. leather. Molenaar recommends a final light scraping to prepare the surface for the first colour layer.

The presence of any layer on the surface of the wood will increase the damping (or decrease the Q) slightly of the body resonance peaks i.e. broaden them. This in general is desirable. Molenaar claims that an excess of glue sharpens the tone while an excess of wax dampens the tone.

(1) Pete Molenaar: Stradivari - Cremona Mystery Disclosed.1985.
                                              ISBN 0 9693713 0 6
(2) Ralph Mayer: The Artists Handbook. N.Y. Viking Press.
(3) Henley's Twentieth Century Book of Formulas, Processes and Trade Secrets, ed. Gardner D. Hiscox M.E. 1965 Books Inc. N.Y.
(4) George Frank: Adventures in Wood Finishing. 1981 Taunton Press Inc.
                                              ISBN 0 918804 06 X.