

Davide Sora

Blackening the chamfers

An aspect, perhaps not fundamental but interesting, of classical Cremonese violin making is the practice of blackening the chamfers of the scroll, a peculiar characteristic present in almost all the instruments of Antonio Stradivari.

There is no precise date nor a certain attribution that certifies the beginning of this practice. It was probably already used sporadically even before Stradivari, also due to the custom of producing musical instruments that featured painted parts.

According to the researches of Sacconi and Hill, he was the first luthier to systematically blacken the chamfers of the scroll, while the other "classic" Cremonese (the Amati and the Guarneri) do not have this characteristic; the only exception is Giuseppe Guarneri del Gesù who, in addition to the chamfers of the scroll, also painted in black the tips of the rib corners and the chamfer of the back button.

In reality, the only evidence of a back button ("nocetta" in Italian) with a blackened chamfer is found in the small violin (pochette) Guarneri del Gesù "Chardon" of 1735, as in all other instruments this detail is always worn by wear.

For a long time, especially in the last century, black chamfers were considered identifying the French lutherie of the 19th century.

After the splendor of the Cremonese violin making of '600 '700 we are witnessing a decline that has as a consequence the shift of the activity of construction of instruments towards France. Paris will also become an important reference point for commerce. Presumably in this context, the practice of blackening the chamfers is adopted by French luthiers, perhaps also to recall the work of the most famous Cremonese, in particular Stradivari. Another, much more serious consequence of the decline of Cremonese violin making is the progressive loss of historical memory and knowledge of processes and construction phases handed down mostly in direct form from teacher to student. This series of circumstances is probably at the origin of the idea, still erroneously supported by some today, that black chamfers are characteristic of 19th century French lutherie.

On the occasion of the exhibition "Masterpieces of Antonio Stradivari" held in Cremona in 1987, I had the opportunity to admire Stradivari's Medici quintet and this "discovery" prompted me to try this technique. From that moment on I decided that I would adopt on all my instruments the practice of blackening the chamfers of the scroll, of the tips of the rib corners and of the chamfer of the back button because it is aesthetically very pleasant and, last but not least, because I believe it is a way to reaffirm this peculiarity of classical Cremonese violin making.

The blackened chamfer, as long as it is of an adequate size and that is not too narrow

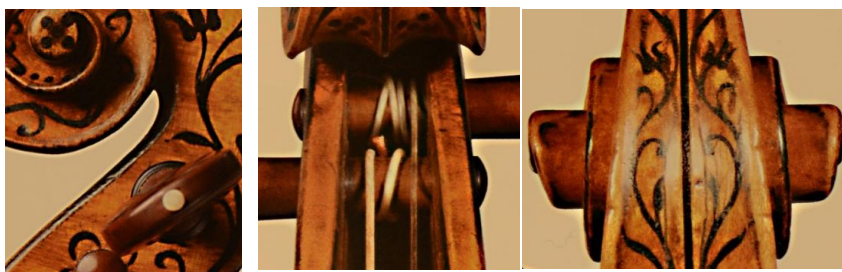
to be aesthetically stiff, is a good way to highlight the development of the scroll. The instruments of Stradivari, as affirmed by the Hill and by Sacconi, have the chamfers blackened only starting from 1688/90 (although I personally believe that this date should be anticipated by a few years, as the Cipriani-Potter of 1683 already presents this peculiarity) when they become slightly wider than the previous production and represent an elegant underlining of the volute.

After Stradivari and Guarneri del Gesù the coloring of the bevels appears only episodically in the work of other luthiers until, in the 19th century, it is taken up partly as a stylistic quotation and partly as a "reminder" to encourage the sale of instruments.

Technically speaking, it is important that the application of the black color takes place after the perfect insulation of the wood to avoid the penetration of the color into the pores, which would have an aesthetically disastrous and irreparable effect. From the specific studies on the material used by Stradivarius for this ornament, it can be assumed that it was a rather dense water-based ink (iron gall type) applied immediately after the insulating / impregnating agent or, more likely, after the application of the ground varnish for avoid any risk of ink infiltrating the wood. The subsequent layers of the colored varnish then covered the ink, guaranteeing protection from wear and improving the visual appearance of the black which, without an adequate filter, would have resulted in a too raw and cold shade.



Chardon 1735



Cipriani-Potter 1683

My method

These are the tools I use: four small scrapers, a conical wooden rod to be inserted into the peg holes to stably support the head during work, a very fine round brush for applying the black color without the risk of significant smudges and another larger one to apply the fixative shellac.

Photo 1 : Tools



With the scrapers I gently remove the varnish from the chamfers reaching the surface of the wood, taking care not to damage the insulation / impregnating agent to prevent the infiltration of black into the pores. It is important to avoid varnish chipping along the edges that would inevitably be filled with black, creating discontinuous lines with loss of sharpness. I use the pointed scraper [photo 2a] to work inside the narrowest spots such as the end of the eye and the inside of the turn, the narrow and flat one [photo 2b] for the rest of the turn and the beginning of the volute, the largest one [photo 2c] for the most accessible parts of the volute and the pegbox. The scrapers are sharpened at 90 ° with double cutting edge which has the advantage of being able to use them in both directions (both pushing and pulling) and of being able to turn the edge with the burnisher obtaining very sharp but not very aggressive cutting edges so as not to chip the varnish, and are shaped so to be able to work easily even in the most difficult corners of the scroll.

Photo 2a : Taking off the varnish with the small pointed scraper



Photo 2b : Taking off the varnish with the small flat scraper



Photo 2c: Taking off the varnish with the larger scraper for the most accessible areas



Photo 3 : Scroll with varnish removed from the chamfers



Preparation and application of black color

An important requirement of the black color is that it is soluble in water: the presence of more aggressive solvents (such as alcohol or turpentine essence) could dissolve the varnish making it penetrate into the wood and making it difficult to remove the excess black. I use a very dense and concentrated acrylic paint based on carbon black and iron oxide, diluted little by little with small amount of water to obtain a brushable consistency but which does not cause dripping.

Photo 4 : dilution of the black color



Photo 5 : application of the black



With a round and pointed short bristle brush (size 000) I apply the color starting from the eye, so that I can rest my hand on the other parts of the head for better stability and precision. One or at most two coats are enough, otherwise it means that the dilution of the color is excessive.

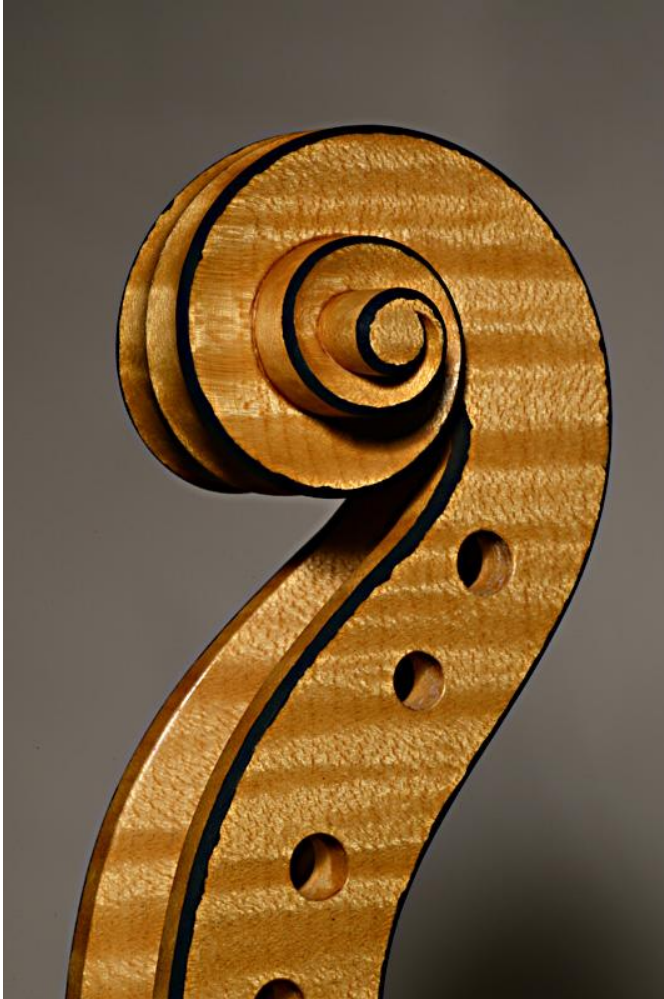


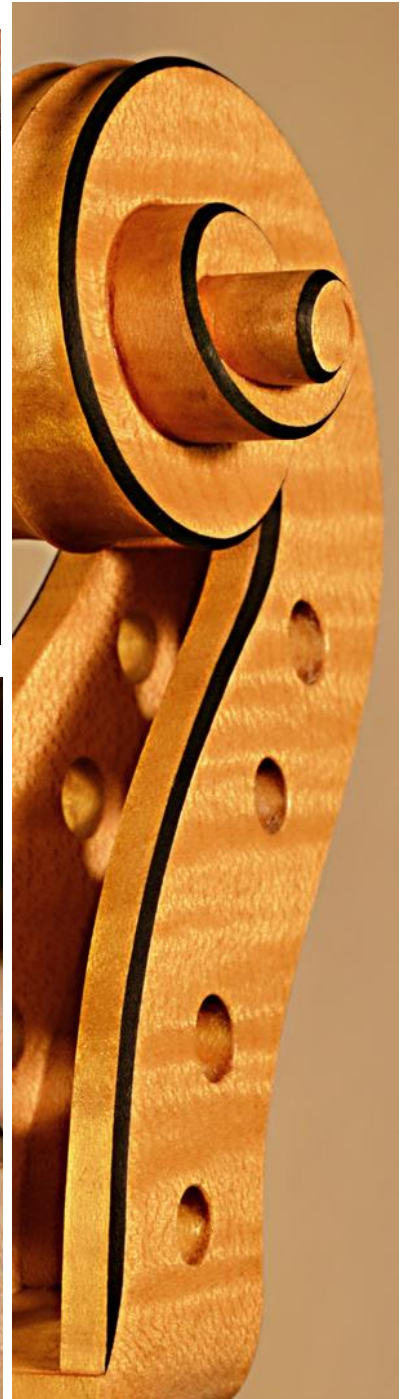
Photo 6 : black color applied on all chamfers

During application it is essential to limit smudges as much as possible (steady hand and a lot of practice help), but it is equally important to make sure you completely cover the de-varnished surface going just above the edges. In this way it will be possible to subsequently eliminate the excess black leaving only a sharp stripe delimited by the edges of the chamfer.



Finishing the black

To remove burrs, I use the smaller scrapers to be able to work with precision along the entire chamfer line. A very light pressure will be enough to remove excess water paint from the varnish. I also use the small oval scraper [see photo 1] to remove burrs from the flutings of the back of the scroll.



Application of the fixative shellac

After finishing, I apply a coat of protective shellac over the black, taking care not to go over the same spot twice in order to prevent the alcohol solvent from removing part of the black color. This will have a fixative action on the black and will protect it during the application of subsequent layers of varnish. At this point the work is finished and you can proceed with the colored varnish.





