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Crafting a violin with Tobias Widemann:

part 3 putting on a brave front



Linings, which are triangular-profiled slivers of wood, are glued to the inside of the sides to widen the gluing surface for the back of the violin.

The inside surfaces of the front and back are planed flat, checking against a known flat surface like a slab of marble.

Corresponding to this, the top edge of the sides is also planed flat so that it mates well with the inside of the back with no gaps.



The shape of the back is marked with a special marker that draws a line an equal distance from the sides all the way around, after the central glue line of the back has been matched with the centre of the box.



The top and back are then cut out with a bandsaw.

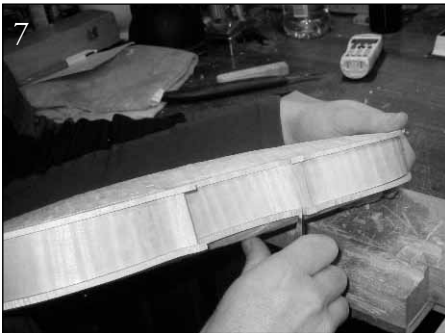


The outside arch of the back is roughed out to shape with chisels.

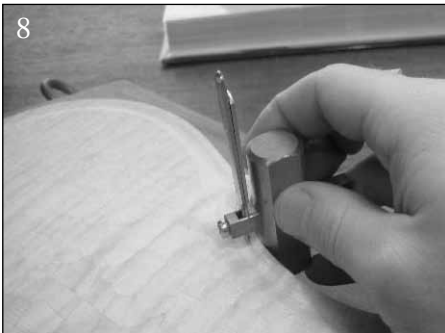




The front and back are spot glued to the sides.



That way the outlines and corners can be accurately finished for flow.



The next stage is to inlay the purfling. These are the fine black lines around the outside edge that provide some anti-splitting protection to the edges of the front and back surfaces, as well as adding to the instrument's attractiveness.

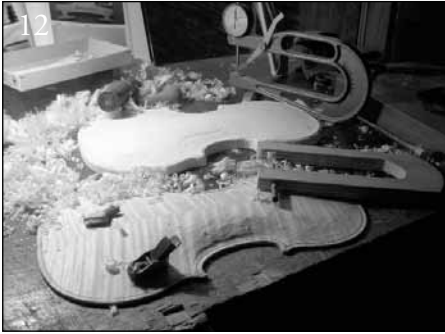


A double knife is used to cut the grooves, and then a very small special chisel removes the waste from between the cuts to a precise depth.



The front and back are removed from the sides by untacking the glue, and the six lengths of purfling with mitred joints at the corners glued in. With a tiny plane the scoop around the outside is shaped that connects the arch with the edge.





Now the outside arching is completed. The surface is finished with planes, then scrapers. Sandpaper clogs the pores of the wood and gives a dull finish.



Then the inside arching must be prepared, again with chisels, planes and scrapers and precise measuring of thicknesses. These vary over the surface.



Finally for the top, the f-holes are cut. Their purpose is to allow the waves of trapped air generated inside the instrument to come out, and for the instrument to breathe. They also break up the top surface to allow it to work, as the top surface, bridge and sound post move during use, even the small wings at the very top and bottom of the f shape move a lot in some frequencies. These holes allow flexibility in the bridge island, and this movement is then distributed over the whole plate. The curves prevent the wood from splitting.

Next step: enclosing the sound box and adding the neck

Photos: Tobias Widemann

