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MAKERS' REPORTS

THE MAKING OF A PLEYEL (PART II) BY PAUL MCNULTY

The hammers were made using a sheep leather from the recent project of the Kunsthistorischesmuseum Wien, where the original formula was employed. This particular batch is a bit hard for string contact, but it works wonderfully well in the three inner layers. It's quite bouncy, as the collagen has not been stripped out with harsh modern chemicals. In the three middle layers I used a European antelope of some sort from Kohlbacher near Salzburg, who continues his 150-year family tannery, with a degree from Vienna University for tanning, no less. He makes beautiful leather – oil tanned. For the outer layer of chamois, in the bass and tenor, I have used two layers of mouflon, becoming thinner and fewer in the treble, ending with a single layer of roe deer.

The Pleyel frame is constructed of 20 mm oak boards, laminated vertically where necessary, as in the bellyrail and in the bentside liner, both of which are 60 mm. As for the bellyrail, another 20mm board is attached in the treble to extend the perimeter of the soundboard glued to it, a bit closer to the player. As for the bentside, its three members are steamed with a wallpaper steamer for two periods of 90 minutes (as my steamer is small and runs dry) in a metal box thickly clad in foam insulating blocks, with a meat thermometer in place to indicate we are at 95+ C. Gloves on, the boards are carried in a group to the form and forced into the shoe which grips the treble end, then wrapped and bent and mashed together around the curve, which is tighter than the end result, anticipating springback. The form has in place the 32cm wide 20mm thick outer frame, or case side wall, previously bent, and they all are bent to fit each other.

The clamped assembly is wheeled into our hot storeroom—30 C at 30% relative humidity—and stays a week before disassembly, after which the separate boards are dried a week further and hog-tied to prevent unbending. Then all are laminated on the form, which has been adjusted to fit the exact curve of the drawing. The laminations prevent any appreciable springback, and after some further curing, the bentside is dressed to shape and joined to the outer frame.

The 20mm bentside outer frame (the outer frame = the walls of the piano, so to speak, to which are attached 2.5mm layers of oak inside and out, then veneered outside) is attached to an assembly comprising wrestplank, bellyrail, cheek and spine, with spine liner. This step of construction leaves the bentside liner to be attached, plus the tail and its liner. The liner refers to the gluing surface for the soundboard perimeter, and the hitchpin rail – a single unit, in Pleyel's case.

Speaking of gluing the soundboard: in this Pleyel, the soundboard is not glued to the bellyrail except in the treble, and is glued for most of its width to a 20mm square spruce rail, or apron, which itself is rebated into the bellyrail, simply resting there, without being glued. My feeling is that this allows low frequencies to develop better, but it may as well have been designed to allow the soundboard not to be restrained as the case moves under tension.

> His apartment, invaded by surprise, was only lighted by some wax candles, grouped round one of Pleyel's pianos, which he particularly liked for their slightly veiled, yet silvery sonorousness, and easy touch, permitting him to elicit tones which one might think proceeded from one of those [h]armonicas of which romantic Germany has preserved the monopoly, and which were so ingeniously constructed by its ancient masters, by the union of crystal and water.

I have now, months later, tested the two Pleyels I have made, and merely sticking a wedge into the soundboard/bellyrail gap, effectively preventing movement, kills the bass – alarmingly. With this feature, not seen (by me) on other Pleyel models, the tenor and bass are most satisfying. I would add, after my delight about the bass, that the treble can best be described in Liszt's words: his apartment, though I think after all he had an 1838 grand and an 1848, so why an upright? For all of that, the two grands I have made have lustrous big trebles, and, when playing the cascading figures at the end of the introduction to the *"La Ci Darem da Mano"* variations, using the una corda, the "crystal and water" wheeze wins hands down. The Warsaw Chamber Opera directors are very enthusiastic about this remark.