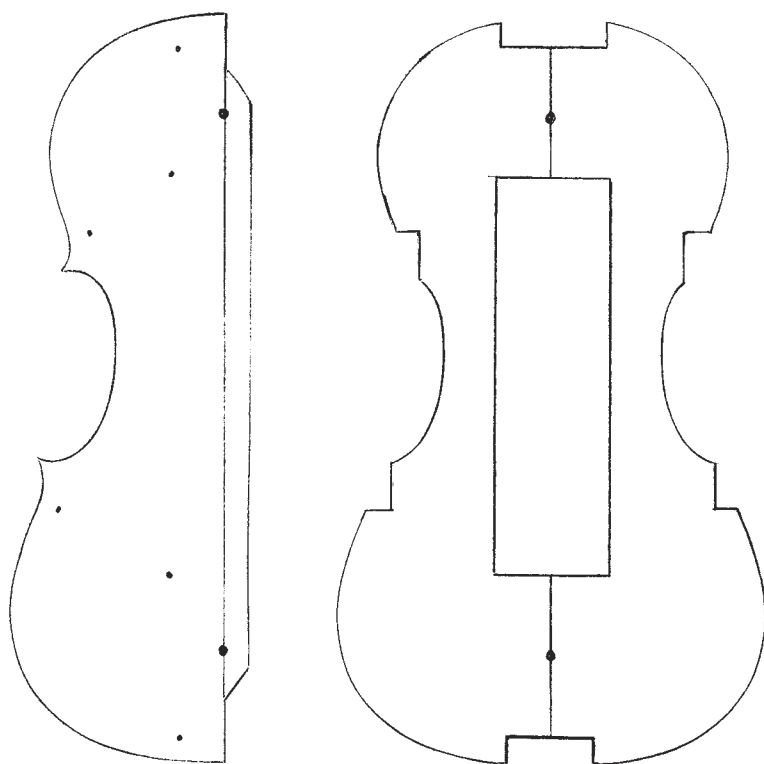


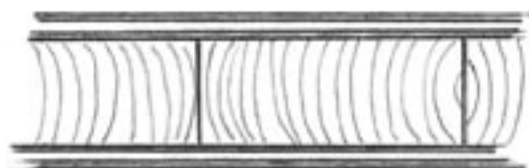
The Modern Inside Mold with Template

The modern technique of inside mold construction begins with the construction of a precise template of the desired model of violin. After the mold is made it should be treated with linseed oil, so that glue and dirt can be cleaned off easily. However, the surfaces where the blocks will be glued must be sized with thin glue, rubbed in with a finger. NO oil must go onto these cut outs.

Materials for template	Aluminum	Zinc Sheet	Plastic
Thickness	0.6 mm	0.5—0.6 mm	0.7—0.8 mm
 Materials for mold	 Plywood, Birch, Red Beech		
Thickness	Violin 12 mm	Viola 14 mm	Cello 40 - 45 mm



The little holes in the template indicate the position of the blocks and will be transferred to the mold when the template is drawn on.



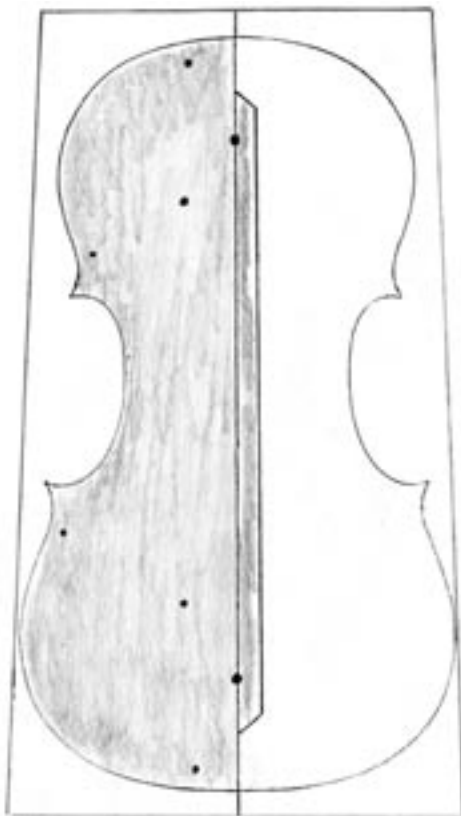
For a cello, the mold can be made out of soft, light wood, covered with a thin piece of plywood on each side. This saves weight and prevents the mold from warping or shrinking. Some commercial plywood is made like this.

Making the Modern Inside Mold Using a Template

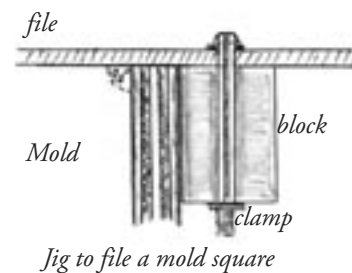
Materials and tools for making a violin mold:

Plywood 12 mm thick, 360 x 220 mm size (for a violin),
2 nails about 2 mm in diameter,
drill bit, bandsaw,
coping saw,
hammer,
rasp and file flat/half or flat round,
drill press,
square

The material for the mold must be straight and not warped or twisted. The grain of the coversheet of the plywood should run lengthwise to avoid excessive splitting during the filing procedure.



Template marked onto a piece of plywood



1. Two nail holes are drilled through the extant holes in the centerline of the template to assure that the template will always stay in place. The use of a drill press is advisable to ensure that the holes are perpendicular to the surface. The diameter of the drill bit must fit both the holes in the template and the nails. The nails should be 20 - 25 mm long so that they can be moved up and down as necessary and will not extend beyond the ribs while planing them.