

### How I Build a Cittern, part 1 - the Mould.

With some remarks on how I should build a cittern, and how they built a cittern.

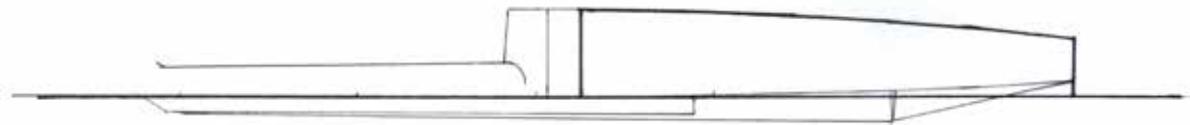


This has been my usual method for more than forty years, occasionally modified a little, and will produce citterns that work for most of the music, both English and Franco-Flemish. My starting point was the six-course Italian citterns made in Brescia by Virchi and others, modified for the four-course English repertoire. Because I had previously made some lutes I chose to copy those citterns whose backs were made from staves. If I had been a violin-maker I might have started from one and two-piece backs and a different mould. No citterns suitable for both copying and a worthwhile amount of repertoire are known to still exist.

Both the belly and the back of the cittern curve slightly longitudinally and laterally. As the back is glued to the neck-block at the very beginning of construction, the neck and its block, etc. need to be considered as an extension of the mould as in the photograph above. For the mould, the belly is ignored except that a rebate is required for it in the neck-block, most easily cut beforehand. Rebates are also needed for the sides of the instrument. The mould and neck-piece are screwed to a

baseboard, best shaped as shown to aid any clamping needed later. The neck-piece needs regular removing and replacing during construction, so the holes for the screws in the baseboard should be reasonably well-fitting and countersunk. It is easiest if the neck-piece - the peg-box, neck, heel and neck-block, are close to finishing before the back is started, although I always leave an extra 1 or 2 mm on the peg-box width against the possibility of small errors.

The plane of the baseboard makes a useful datum line in the side elevation of the cittern, from which measurements can be made during the initial designing.



The depth of the body at the neck-block will be twice or more than its depth at the end-block. Perhaps 50 mm to 20-23 mm. (The Ashmolean Virchi is only 17 mm deep here including the thickness of the belly and back, but, like many other citterns, it has no end pin. Modern musicians will probably demand one, and room must be found for hitch pins as well.) For a 43 - 45 cm string-length, the bridge should be around 16 - 18 mm high, and the action at the 12th fret around 1.5 mm. The fingerboard will be around 9 - 10 mm deep at the 12th fret and either be constant in depth (thickness) or taper slightly towards the nut. From the very small number of examples available, more Italian citterns taper than North European ones, so their end-blocks are closer to the datum line.



The mould can be solid or made in layers. Both work, but it is convenient to be able to use small cramps or clothes-pegs to hold the back staves in place while the glue sets. The curves and flats across the back are made much like a lute back. Their slighter curvature is a little more difficult to make accurately.

This is only the way that I use. There will be other ways. As fitting the back bars and the end-block can be fiddly later, a cut-away for the end-block and slots for the back bars could be part of the mould. An objection to the back bars is the shrinkage of the glue between staves and inserts over the width of the back, and several days, which could perhaps lead to cracking. The end block is not difficult to fit later and shaping the back outline is easier without a rebate. A step in the baseboard to lift the surface below the mould, extending from the belly rebate could be useful. I have 'bodged' it on occasion with pieces of card, and intend to adopt it for future moulds. (The length of wood which comprises the end and sides will have a straight edge adjacent to the baseboard and its full width will only be required near the neck-piece. It is conveniently made from a longish spare lute rib which is very likely, in the UK at least, to have been cut 2 inches in width. The 2.5 mm of the rebate may well lift it sufficiently to cover the depth of the mould and back.)

At the 2001 Michaelstein cittern and guitar conference, Louis Grijp mentioned his discovery of two Dutch inventories containing valuations for both citterns and their moulds. The moulds' values were twice that of the citterns so presumably were complex, perhaps made in sections to facilitate the striped sides common in Dutch paintings.

All the known Italian citterns have 'hooks', presumably derived from those shown in images of the earlier cetras. All of the known North European citterns, and their many painted images do not. None of the English representations clearly show them, but equally none clearly show that they were not present. Collier's painting 'Still Life with a volume of Wither's 'Emblems'' in Tate Britain, and especially also the inlaid cittern on the 'Eglantine' table in Hardwick Hall have peculiarly shaped forward edges to their peg-boxes which may suggest the presence of something not properly understood by the artist. Perhaps wrongly, I have mostly included them on English citterns as they provide one way of placing a cittern in safety during a concert.

The two citterns preserved in parts from the Lelystad shipwreck had apparently one-piece backs, and the Berlin and Brussels citterns have their striped backs of veneer glued onto one-piece backs. Again, the V&A cittern is veneered. So perhaps this was the usual way of working outside Italy. The Lelystad citterns also have their heels and neck-blocks separate, which obviates the difficult fitting of the sides into their rebates. If this is usual for North European citterns, it would account for the non-necessity of the finials which cover this often untidy joint on Italian citterns.