



Andrew Hartig Custom Strings for Period Wire-Strung Instruments

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Stringing double-strung courses without using string loops

On citterns in the 16th century, it is possible to infer the use of a single strand of wire without loops for the stringing of double-strung courses. This is made possible by a) historical evidence of triple-strung courses involving one twisted string and two octaves, and b) the absence of conspicuous wear marks on the “comb” string-holders of Italianate citterns. For the former, a twisted string has a natural occurring loop, leaving the remaining octave strings as a pair. As for the latter, there is evidence of a wire rod being used under the comb in order to bear the brunt of the force of the strings in this region. Indeed, one survives on the *ceterone* by Gieronimo Campi (Canpi). One can see what this arrangement looks like on each style of instrument in the illustration, center.

Stringing in this way certainly simplifies some problems. For one, it allows one to use a single strand of wire without having to create a special loop on the end. For another, by not having a loop, there are no potentially sharp wire ends projecting near the end of the instrument on which one might snag a sleeve or skin, or mar the end of the instrument.

The disadvantages are few. String breakage does cause both strings of a course to be rendered inoperable, halting play. On the other hand, it is advisable to replace both strings in a course when one needs replacing so that they will be more in tune. (The fact that one string will have been stretched out more than the other may cause the strings to play out of tune due to small differences in their actual diameter.) As to the conjecture that the strings will not tune well because the tuning of one will cause the other one to slide around the end-pin or comb-wire and hence influence the tuning of the other: experience shows this not to be the case. While the strings will initially slide around the rod/end-pin while tuning at *very* low tension (far below playing pitch), once one has brought the strings to pitch, the forces on the string where it bends around the

rod/end-pin, the saddle, and the bridge really prevent further movement.

In practice, this type of stringing is easy to accomplish and can be done on any early instrument in which there are end-pins of some sort. To do so, start with a length of wire more than twice the length of distance between the tuning-peg and the end-pin. (I find that 2 meters is generally more than enough for most citterns). Begin by threading the end of the wire through one tuning-peg and wind it several times around as you ordinarily would for putting on a new string. Now guide the wire down to the end of the instrument and around the end-pin, making sure the wire takes a bend where it goes around the pin (this helps to prevent it from slipping). While holding the string in place, bring the loose end of the wire

back up to the tuning box and thread/wrap the wire on the peg as you normally would. Twist the peg so as to take out all of the slack from the string. Make sure that the string is aligned in the proper slots of the saddle, bridge, and nut.

(In the case where your instrument has a comb and rod arrangement,

I find it easier to start by putting a slight bend in the string at the midpoint, then threading the string into the comb first so as to assure that the string is in the proper place. Continue by winding onto the pegs.)

Now gradually tune each of the pegs of the pair, first one then the other, so that the tuning minimizes any string slippage around the rod/end-pin. (If for some reason you find that you have too much wire wrapped on one peg and not the other, it is possible to coax the wire gently around the rod/end-pin to even things out; though note that moving the bend in the wire risks creating a breaking point or a spot where the string will play false.) Once you are close to pitch, you should notice no influence of the tuning of one string in the course on the other. At this point, proceed as usual—and enjoy!

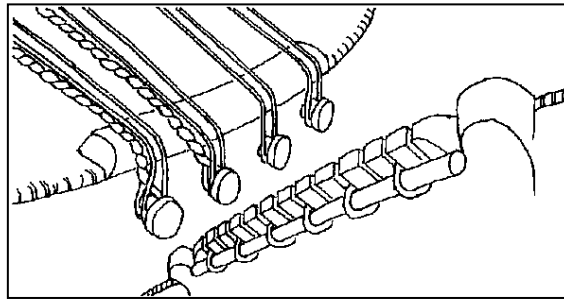


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