

*A handbook of historical stringing practice for keyboard instruments 1671–1856*

Compiled, edited and published by Malcolm Rose and David Law

This new publication fills a void in the literature for those concerned with stringing keyboard instruments. The book contains an invaluable 84 “Principal Stringing Tables” detailing instruments surviving with “enough of their probable original stringing for fairly complete stringing tables to be constructed.” The first instruments included are a clavichord of 1775, a double-manual harpsichord made in Lyon in 1711, a few single manual harpsichords and a spinet. Then begins the long record for early pianos beginning with the 1749 Nuremberg Silbermann.

Each table details the notes, speaking length in mm, diameter in mm, and resultant tension assuming A425 for pianos, A415 for others. Additional information about stringing material, crossover points, who supplied the measurements and a few background notes on the more interesting instruments are also supplied.

There are then 47 tables of which the original instruments provide only “Fragmentary Evidence”, but these are interesting because of including more clavichords and harpsichords. When read with the more complete tables, and some extrapolation carried out with the use of the formulae in the back of the book, a more complete picture emerges.

Several pages deal with “Designing a Set of Strings” and these are instructions on how to make tension graphs to help reveal problems of instability of tonally weak areas in particular instruments, and hence enable correction to be made via string material and diameter. The compilers’ graphs for all the 84 principal instructions are included, so it is possible to get an idea of what the tension on these and similar instruments should look like.

Largely dealing with early pianos, the essential wound string calculations are included, and an appendix shows wire densities of material from commonly used suppliers. There are blank tables with all the needed basic formulae that even I could understand to assist me with calculating and plotting my own tension graphs. I spent a few hours putting this scientific method to the test on an instrument I had in the shop, and as a result decided to change one string (out of 116).

This process perhaps assumes that there is a scientific basis for stringing instead of just aural and practical considerations. Perhaps all coincide.

I like to see the term “Fortepiano” reserved for instruments of South German and Viennese origin, instead of being applied to all early grand-shaped pianos. The authors would have pleased me more if they used “Pianoforte” for their English piano content.

Several of the tables display string diameters to three decimal places, which made me think of extraordinary accuracy until I found the preface mentions that these were converted from the inch measurements supplied. The mm measurement is essential for the calculation of tension. I think mm are great for measuring length of strings, but I just love having string diameters in common sense .001".

There are many factors that need to be addressed when stringing a keyboard instrument. Bad choice of wire will make even a good instrument sound lousy., and better wire can in some cases remarkably assist in improving instruments of dubious design. This handy book provides much evidence in one place and is another step in helping makers and restorers come to grips with historic keyboard construction practices.

Carey Beebe May 25 1992

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