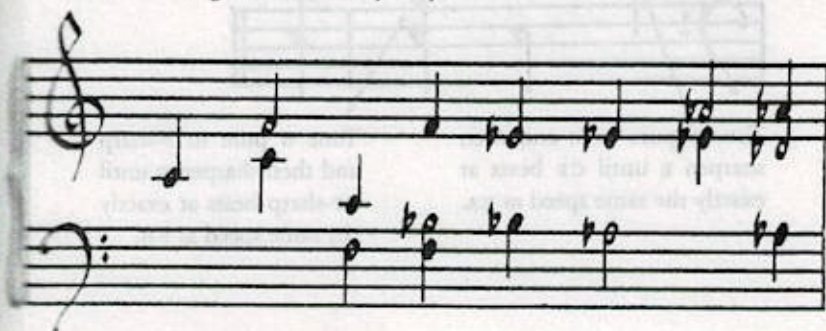


Thomas Young Well-Temperament

This is the "Temperament No. 2" by Young. Temperaments similar to this were also used in eighteenth-century Italy.



Tune D pure to F and then sharpen D until FD beats at exactly the same speed as F-sharp.

Tune A pure to C and then sharpen A until AC beats at exactly the same speed as F-sharp A.

Tune G pure to D and then sharpen G until GD beats at exactly the same speed as GC.

[continue to next page]

Thomas Young. "Of the Temperament of Musical Intervals," *Philosophical Transactions of the Royal Society of London*, Vol 90, January, 1800, p. 145.



Tune E pure to C and then sharpen E until C E beats at exactly the same speed as E A.

Tune B pure to F-sharp and then sharpen B until B F-sharp beats at exactly the same speed as E B.

Thomas Young Well Temperament from A-440

A-440

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18

19 20

21 22 23

24 25 26 27 28 29

30 31

2.0 1.5 1.5 1.5 1.4 5.3 5.3

1.8 4.1 6.6 9.3 8.3

JUST*

JUST

4.1 5.3 7.1 8.8 9.3 10.7 11.5 11.5 8.5 8.5 8.8 8.8 0.8 1.0

0.5 0.8 0.8 1.0 1.4 4.1 4.3 6.6 9.3 9.9 14.0 0.7 1.1

11.8 11.8 0.5 0.6 0.7 0.7 0.8 3.8 5.3 5.9

(Bearing is E to F*)

73

INSTRUCTIONS FOR TUNING THE REPRESENTATIVE EIGHTEENTH-CENTURY TEMPERAMENT ACCORDING TO ONE'S OWN PERSONAL TASTE

All tempering variations in this section conform to Figure 71-1. Tune the following quarter notes in the order written.

1 Tune C to any pitch desired.

2 Temper E from C so that the major third C E sounds proper according to your taste (sharpen or tune just).

3 Tuned before
Test
Tune just

4 Tuned before
Test for equal beating, provided that G is in reasonable tune (the beat speeds of E G and G E must be slow enough to comprehend).
Temper G# from both E and C so that the major third A# C beats one and one-fourth times as fast as the major third E G#. Both intervals must be wide.

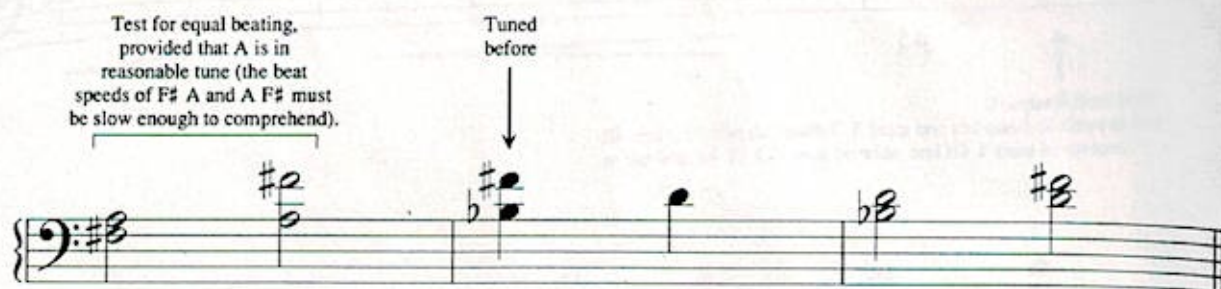
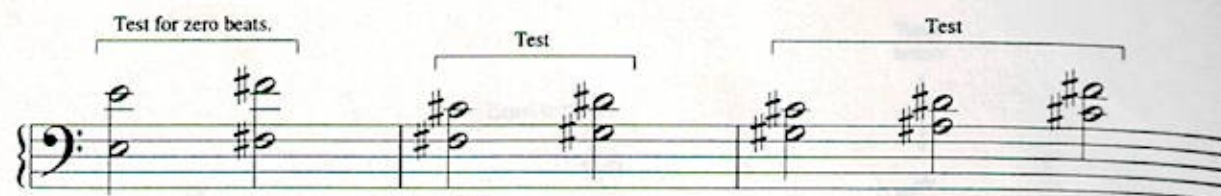
5 6 7 8 9

Tuned before

Tuned before

By tuning these fourths and the fifth A# E# in just intonation, according to Thomas Young's rules of 1799, well temperament is formed. By tempering these fourths slightly narrow and the fifth A# E# slightly wide, modified meantone temperament is formed. (For tuning the nineteenth-century Victorian temperament, temper these fourths the smallest perceptible amounts wide and the fifth A# E# the smallest perceptible amount narrow. For Victorian temperament, the major third C E must beat four or more times per second.)

Crescendos denote increasing beat speeds.



Temper D from both B \flat and F \sharp so that the major third D F \sharp beats one and one-fourth times as fast as the major third B \flat D. Both intervals must be wide.

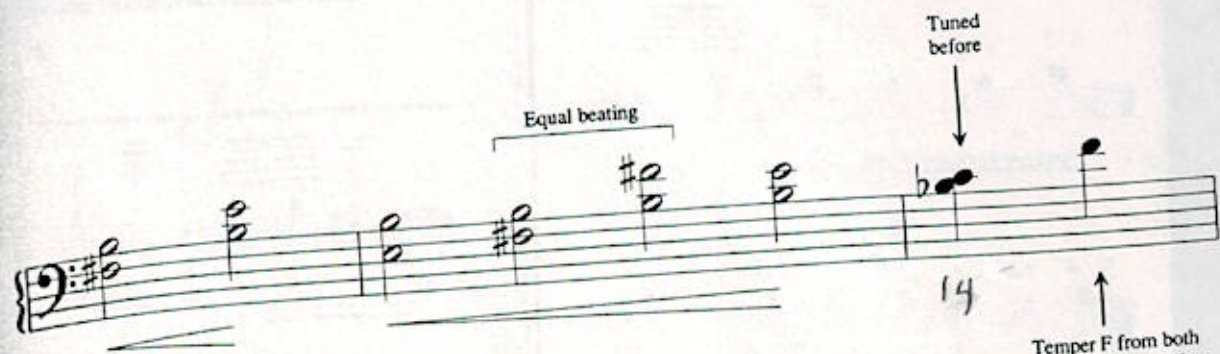


Temper G from both C and D so that the fourth G C beats one and one-third times as fast as the fifth G D. G C must be wide, and G D must be narrow.

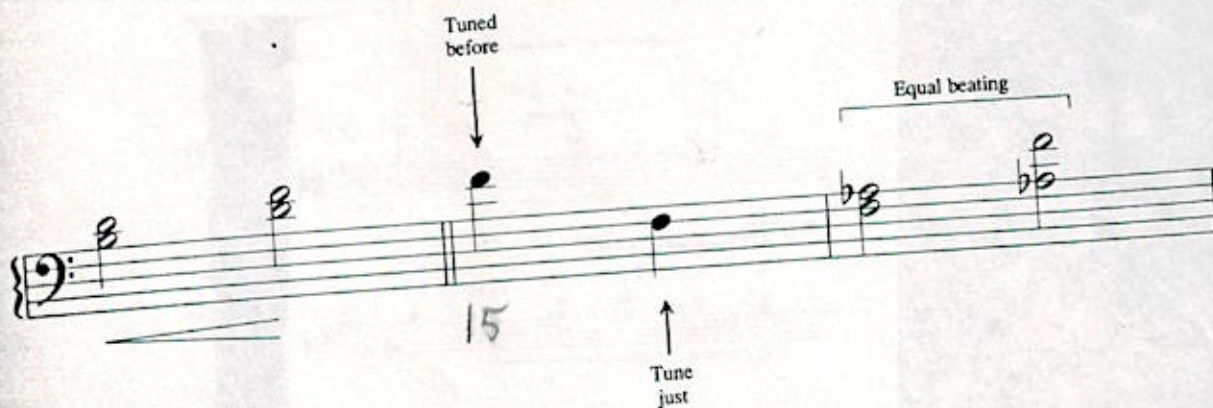
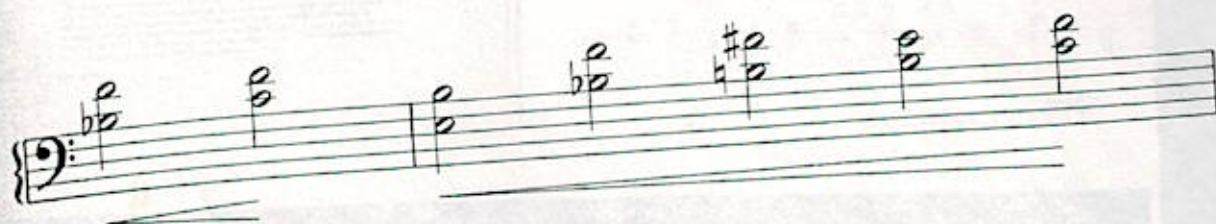
Temper A from both E and D so that the upper fourth A D beats one and one-third times as fast as the lower fourth E A. Both intervals must be wide.



Temper B from both F \sharp and E so that the upper fourth B E beats one and one-third times as fast as the lower fourth F \sharp B. Both intervals must be wide.



Temper F from both B♭ and C so that the fourth C F beats one and one-half times as fast as the fifth B♭ F. C F must be wide, and B♭ F must be narrow.



This completes the bearing section from E to F-sharp.