## **Tuning Techniques**

Roger Gable, Ed McMorrow, Dean Petrich Stage 7 Pianos 1/16/2017

To begin with, let's list our concerns and questions about tuning.

## **Roger Gable**

Unisons determine stability. If you are tuning the same piano every year and the unisons are out, you are doing something wrong.

The continuing education of the PTG cultivates much more solid technicians than elsewhere in the world.

Stbility:

- Rendering would affect the solidity. If there is poor rendering over the capo, for every pound you pull up, pitch must be pulled up a lot further. When going back down with impact or flagpoling, you're only guessing.. Long waste section, high friction.
- Pinblock: jumping pins
- Size of tuning pin. Steinway starts with #1 pins.

Techniques:

- Turning
- Impact
- Flagpole

With a new, even pinblock, you can pull up, let it drop down, and impact and flagpole quickly. A restrung pinblock might have every pin or string different, it takes longer to even it out.

## George Morgan

Roger always stand to tune any pinao. Make sure you have solid footing.

Ed McMorrow

The piano is a series of springs, with forces and tensions in balance. Think of the springy nature of each part of the piano. Caster Iron can be flexed but it can't be bent. Put a strain on it and it will return to its original shape. It will either flex or break.

Piano wire is the same. The material is springy. Remove the tension and it returns to its shape.

Tuning pins are made of hardened steel.

The pin block is very springy because it is wood

Hitch pins are mild steel, and awhile they acan spring back, they can also be bent.

Before stuning a string, first ask how stable is it right now? Do a test blow on the string before tuning it at all to see if it holds or moves. Now you know where the pitch is. To get the pitch to where it should be,

Toorquing the pin.

Rotational position, then add other elasticities.

Flagpoling is not stable because you are crushing and elongating the pinblock at the top, but that wood will spring back when the humidity changes.

Rogerr:

There are more exceptions to the rules than there are rules.

It's hard to gettoo much bearingon the Vbar onuprights.