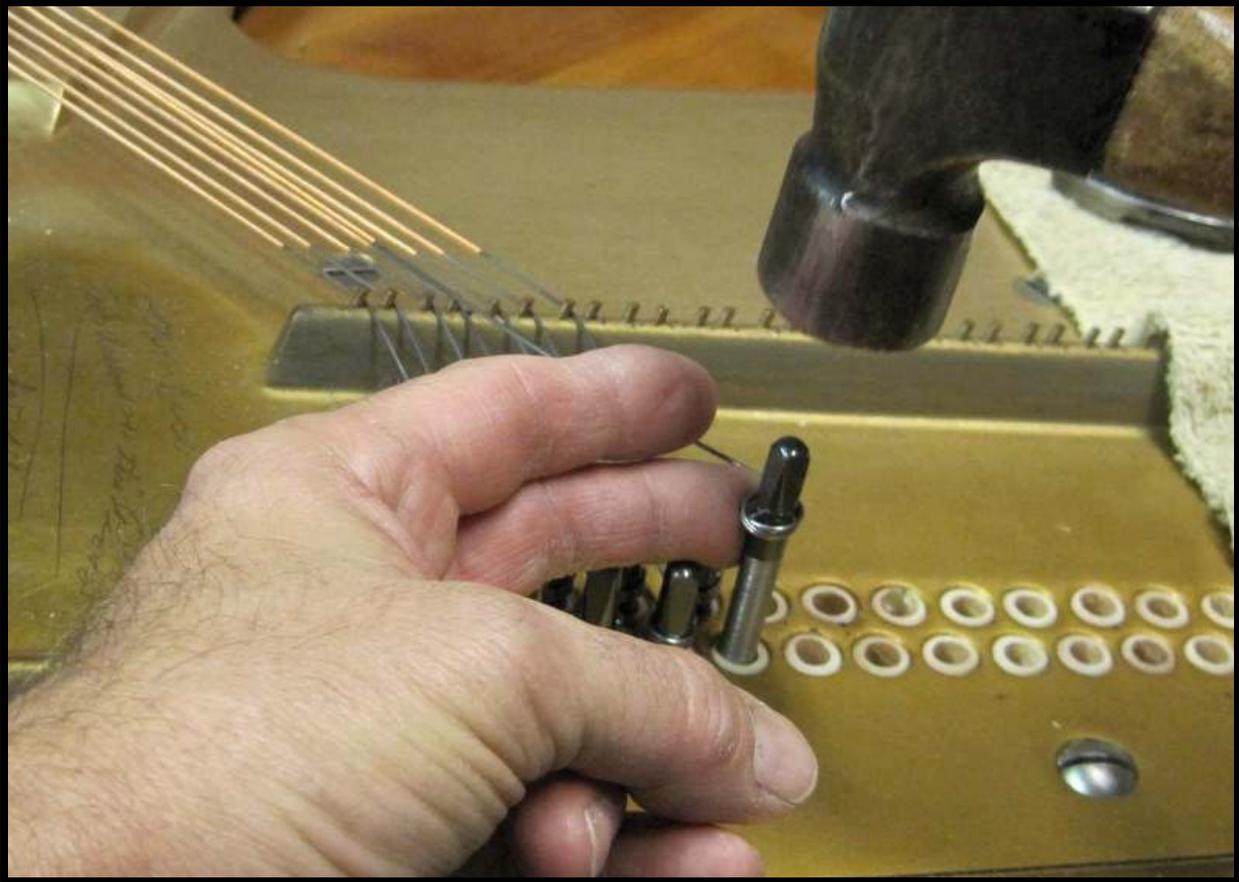


Schaff Piano Supply Company Presents:

# Repinning and Restringing the Upright Piano

## Part 3 - Finishing the Bass

Belly Work



By Chuck Behm

# Repinning and Restringing the Upright Piano

## Part 3 - Finishing the Bass



### **-Rationale-**

Restringing and repinning the bass of an upright piano may be done in conjunction with an overall restoration of an instrument, or may be done as a stand-alone procedure. Budget-permitting, an overall repinning and restringing of a piano is certainly to be preferred. Sometimes, however, when the bass of an older upright has a particularly lackluster, tubby tone the owner might opt for replacing the bass strings but not the treble. For the sake of economy, the procedure that gives 'the most bang for the buck' would make sense. Also the pins holding the bass strings are more prone to becoming loose, in that there is more wood and fewer pins in the bass pin field. Thus, repinning the bass but not the treble section of the piano is sometimes a sound course of action.

Of course, whether the piano as a whole or just the bass section is being repinned and restrung, following a well-thought out plan of action in replacing the pins and strings will make life a bit easier for the technician.

## RELATED ARTICLE YOU'LL WANT TO DOWNLOAD:

Schaff Piano Supply Company Presents:

Removing Bass Strings  
for Duplication  
Basic Step-by-Step Procedures



By Chuck Behm

**Ready to View**

Part Work

*Important message:  
Other related articles are noted at the beginning of part 1 and 2 of this series. These articles are available now or will be available soon on your Schaff eStore for download.*

*Check the Schaff eStore website often to take advantage of newly released articles geared to the new technician!*

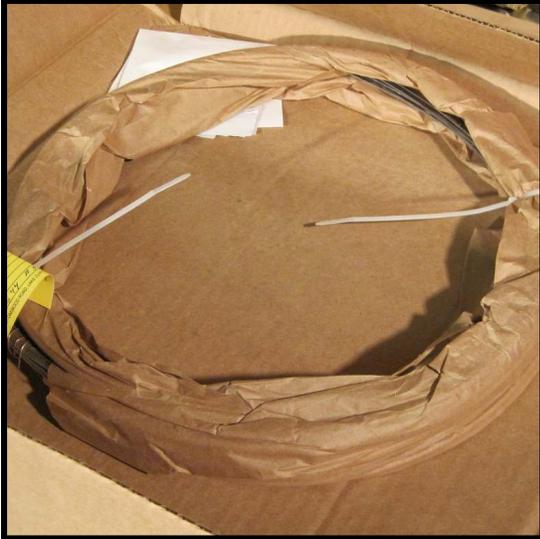
**Author's note:** The following step-by-step procedures are intended to provide a starting point for the technician trying out this repair for the first time. There are, of course, various techniques used by other technicians to obtain excellent results. In developing new skills the new technician is well advised to consult more than one source of information, to explore the variety of procedures available for his use.

That being said I would encourage the new technician to be bold in trying out new methods and repairs. Always, however, the beginner would be wise to try out new techniques on a practice instrument before working on a customer's piano!

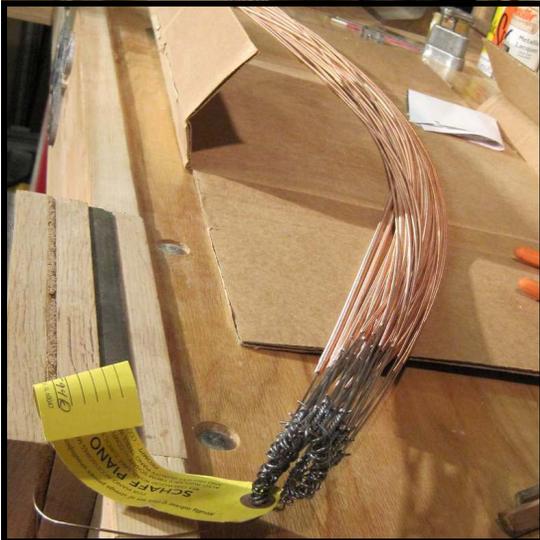
This is the final segment of a 3 part series. The initial segment concerned setting up the work place for the project at hand. The 2nd segment dealt with repinning and restringing the treble section of your project piano.

The next page begins with step 59, picking up from where the directions were left off at the end of part 2. Chuck Behm

## Belly Work / Repinning and Restringing the Upright Piano



**Step 59:** At this time, the set of bass strings which have been duplicated for you by Schaff need to be opened. (If you are repinning and restringing the bass as a stand-alone procedure and need to have a new set of strings made refer to the article, "*Removing Bass Strings for Duplication*," available now for download from your Schaff eStore.)



**Step 60:** Next, unwrap the set of strings. Snip the plastic ties and stretch the set of wires out length-wise

*Caution: When snipping the plastic ties, firmly grip either end of the strings to prevent the bundle from springing open.*

Do not remove the set of strings from the copper wire which has been used in bundling them together, in that they must be replaced in the exact order they are in! They will be removed one at a time.



**Step 61:** Spread all tools and supplies out in a convenient spot before beginning to work. If the piano itself is on its back and is to be utilized (as in the photo to the left), drape a towel over the area to prevent damage to the plate or bridges as tools are picked up and returned as work progresses.

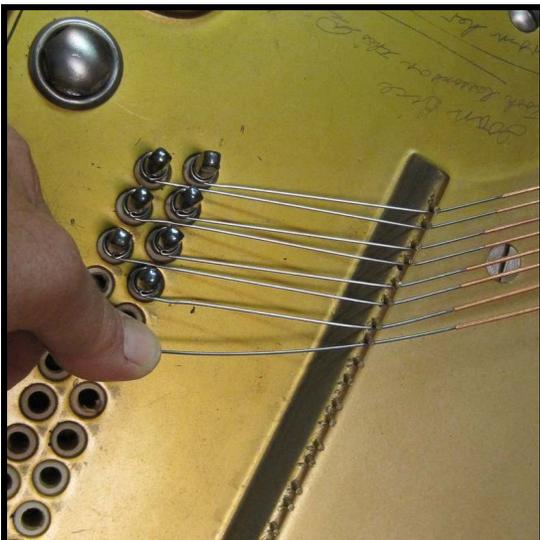
## Belly Work / Repinning and Restringing the Upright Piano



**Step 62:** Unwrap the bundling wire which is threaded through the loops for the hitchpins on the bottom end of each of the strings. Leave the yellow tag in place on the one end of the bundling wire to prevent the strings from coming off. Draw the strings off the other end of the wire one at a time as you install them in the piano.



**Step 63:** Start each string on the bottom end of the piano. *Note: If the keybed of the piano is in place, first run the string between the bottom of the keybed and the plate, then pull the looped end of the string down towards the hitchpin.* Place the loop on the end of the string over the hitchpin, and then past the two bridge pins (always go to the inside of the slant). Then step around to the top end of the piano, and pull the slack out of the string.



**Step 64:** For exact measurement of length, place the top of the string on the correct upper bridge pin, and pull the leader of the string past the target pin hole.

## Belly Work / Repinning and Restringing the Upright Piano



**Step 65:** While holding the string and a ruler with your right hand as shown in the photo, pull the string tight past the correct hole with a pair of pliers. With the end of the ruler lined up directly over the center of the hole, pinch the wire between your thumb and forefinger, while holding the ruler in the crook of your hand. (For more information on this procedure, refer to steps 38 - 41 of *"Repinning and Restringing the Upright Piano: Part 2 - Tackling the Treble,"* available now from your Schaff eStore.)



**Step 66:** Setting the pliers down, pick up your [wire cutters \(Cat. No. 225A\)](#), and grasp the string at the target point (around 3 to 3 1/4 " from the center of the hole) with the cutters. Compress the jaws enough to just bite into the string, but not enough to cut through.



**Step 67:** By keeping your grip on the string with the wire cutters, you may now put the ruler down and lift the string up off of the upper bridge. Hold the wire firmly with your left hand, and snip off the excess length.

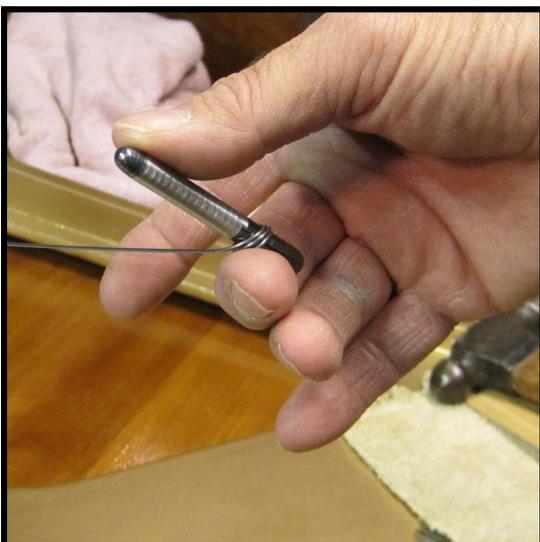
## Belly Work / Repinning and Restringing the Upright Piano



**Step 68:** Return the wire cutters to your tool area, and pick up your [needle nose pliers \(Cat. No. 239\)](#), to make the becket in the wire. As described in step 13 of part 2 of this series, use a file mark scratched into the jaws of the file to bend the wire to the precise length needed.



**Step 69:** Use your [tuning pin crank \(Cat. No. 109\)](#) to make a coil with three turns on the end of the wire.

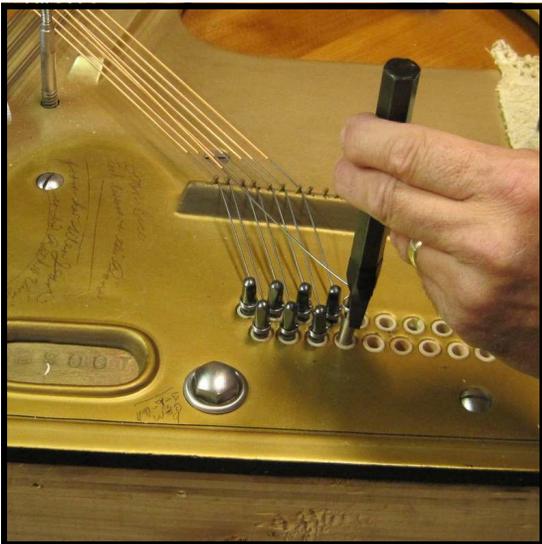


**Step 70:** To put a twist in each wire (a procedure commonly done in many factories), do it now by rotating the pin in your hand 180 degrees *in the direction of the winding*.

## Belly Work / Repinning and Restringing the Upright Piano



**Step 71:** With the twist added to the string, insert the end of the pin into the correct pin hole. Hold the pin at the correct angle to the plate), and tap the pin in just a bit with your **ball peen hammer** (Cat. No. 1916). (For more information about the topic of the angle of the pin relative to the plate, refer to page 11 of *"Repinning and Restringing the Upright Piano: Part 1 - Initial Set-Up,"* available now from your Schaff eStore.)



**Step 72:** Tap the pin most of the way in, using a **pin punch** (Cat. No. 174A) with a depth gauge. (*See steps 27 - 28 of part 2 of the series for more information.*)



**Step 73:** Use your **string hook** (Cat. No. 135S) to pull the string around the correct bridge pin on the upper bridge. *Note: Before proceeding, also check to make sure that the string is still correctly aligned through the two bridge pins on the lower bass bridge.*

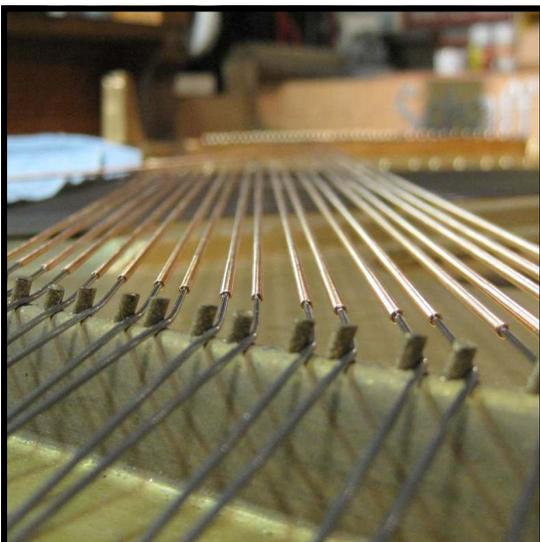
## Belly Work / Repinning and Restringing the Upright Piano



**Step 74:** Using your string hook and your tuning hammer, raise the pitch on the string while snugging up the coil at the same time. Use your thumb on the top of the tuning hammer head to exert leverage as shown. To further tighten the coil use an [impact coil tightener \(Cat. No. 3101\)](#). (For further information on this procedure, refer to steps 51 - 53 of part 2 of this series.)



*Note: The completed coils should be uniform in every way. The number of winding of the coil, the height of the bottom winding from the plate, and the point at which the becket emerges from the hole in the tuning pin should be as precise as possible.*



**Step 75:** Continue with the process until the entire set of bass strings have been installed.

## Belly Work / Repinning and Restringing the Upright Piano



### The Beauty of this Work

Technicians frequently raise the question of how far to go with an older instrument. There are those who are convinced that extraordinary measures to revive an elderly piano are unjustified unless the piano has a premiere brand-name that will insure commercial value. From a purely dollars and cents standpoint, their way of thinking is correct.

I tend, however, to take a less hard-headed approach when asked by a customer to consider working on a vintage piano that has sentimental value. To me, the pleasure of working on a long-neglected piano to bring it back to its original beauty is reward enough, especially when the piano has a lot of meaning to its owner.

For this type of piano such work as the installation of new pinblock panels, a total repinning and restringing, and all the other work that can be done to bring a piano back to the condition it was in when it left the factory a century or so ago makes sense and just feels right.

**Visit the Schaff eStore to download the first two installments of this series:**

<p>Schaff Piano Supply Company Presents:</p> <p><b>Repinning and Restringing the Upright Piano</b></p> <p>Part 1 - Initial Set-Up</p>  <p>By Chuck Behm</p> <p><b>Ready to View</b></p>	<p>Schaff Piano Supply Company Presents:</p> <p><b>Repinning and Restringing the Upright Piano</b></p> <p>Part 2 - Tackling the Treble Strings</p>  <p>By Chuck Behm</p> <p><b>Ready to View</b></p>
--	--

**Previously:** Techniques for setting up your project piano for a total job of repinning and restringing are covered in part 1 of this series. In part 2 of the series, step-by-step instructions are given to guide you through the process of repinning and restringing the treble section of your piano.

*Note: Tool and supply inventory for the entire repinning / restringing procedure will be given at the conclusion of this part of the series.*

## Belly Work / Repinning and Restringing the Upright Piano

### Tools and Supplies

For your convenience, all the tools and supplies necessary to complete this procedure are listed with corresponding catalog numbers.

#### Tools:

Shop repair truck.....	Cat. No. 1901
6" tempered steel rule .....	Cat. No. 3197
Tuning lever.....	Cat. No. 21
Pin punch.....	Cat. No. 174A
String hook.....	Cat. No. 135S
Needle nose pliers.....	Cat. No. 239
Impact Coil Tightener.....	Cat. No. 3101
Tuning pin crank.....	Cat. No. 109
Starrett wire cutters.....	Cat. No. 225A
Micrometer .....	Cat. No 3338, 4044, or 3299
Ball peen hammer .....	Cat. No. 1916
Pin punch .....	Cat. No. 174a
Rubber mute.....	Cat. No. 203 1/2
Round nose pliers.....	Cat. No. 241
String spacer .....	Cat. No. 146, 134 or 133

#### Supplies

Tuning pins.....	Size 2/0, 3/0 or 4/0
1/3 lb. reels with brake.....	12 (.029") to size 22 (.049")
Tuning pin bushings..	Cat. No. 346 A, B or C or 345 A, B, or C

Important note: Ordering information is given for the use of Schaff account holders only.

**To order, call Schaff Piano Supply at 1-800-747-4266,  
or go on-line at <http://www.schaffpiano.com/>**

# Belly Work / Repinning and Restringing the Upright Piano

## Notes on Procedures