



## **Chapter 52 Los Padres**

### **Virtual Meeting Show & Tell July, 2020**

Hello fellow members

Since we are confined to our homes by the Covid-19 pandemic and our regular meetings have been canceled, here is another *Virtual Meeting* Show and Tell.

I didn't think there was going to be another issue until I received the following story from Jim Duncan. Thanks Jim.

And my clock repair adventures continue.

Phil Keys  
President

From the NAWCC Chapter Relations Newsletter:

### **More NAWCC Videos On Vimeo!**

In addition to the NAWCC presentations that are posted on our Vimeo site we now have all the NAWCC Webinars, 6 years worth of

NAWCC Ward Francillon Symposiums and over 100 NAWCC Library Videos.

You can also sit in on an extended talk and demonstration of the Monumental Engle Clock and view The Atlanta Chapter 24 production of the Clocks of the Georgia Governors Mansion.

You can view the videos on the internet at <https://vimeo.com/nawcc>. Once you access the site, simply click on the "More" option and select Showcases from the drop down menu.

This will present you with links to the albums that contain the videos from the Gala, the National Convention and more.

Clicking on any album will open it and allow you to select and view any of the videos that interest you.

As time and opportunity permits we will be adding videos to the Vimeo site so check back often.

Enjoy the view!

## Jim Duncan's English Lantern Clock

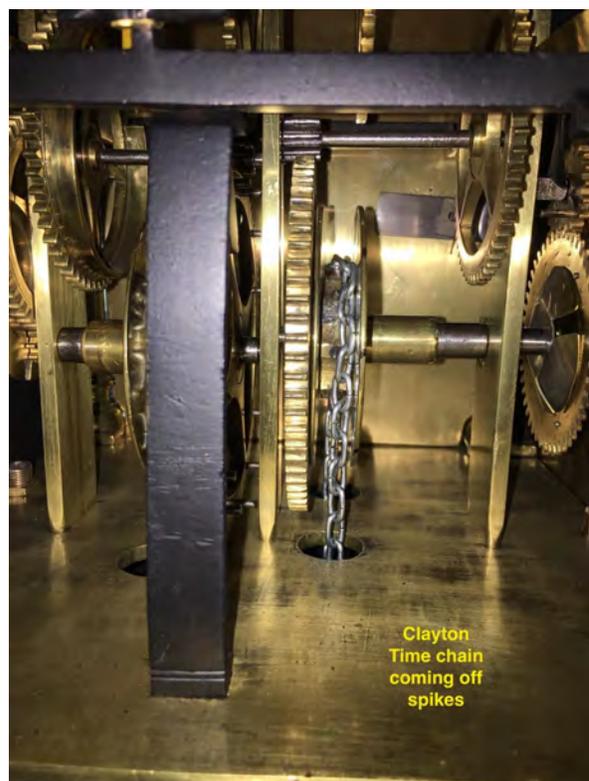


I've an English lantern clock that I restored a year or two ago. The only problem is/was that the weight chain (Huygens loop type) twists and either jams to a stop or comes off the sprocket with a teeth grinding "snap". The weight is 18 lbs, so there is a lot of energy at play.

I stopped testing on the clock until I was ready to have another go. And that time was last week.

Decided that the culprits were either the great wheel pulleys or the chain links (or both). When I bought the clock it came with only a short section of bronze chain, and judging by the variation in the link shapes, it was handmade.

But it didn't fit the pulleys very well regarding the pin-to-pin distance that the links fit over. But it did fit the link width which must fit with the distance between the cheeks (side



walls).

I could get a new steel chain from Timesavers, or Meadows & Passmore (UK), but while



it fit the pins, the links were not wide enough for a good fit to the links.

I was not ready to make a new chain myself and didn't know of anyone who might do it for me. So my focus moved to the distance between the two cheeks. And I wanted a process that was largely "reversible", and not something that would scar the old thing for the rest of eternity.

I decided to fabricate some spacers/shims that would close down the space that allowed the chain to twist and crawl off of the pins. See photos.

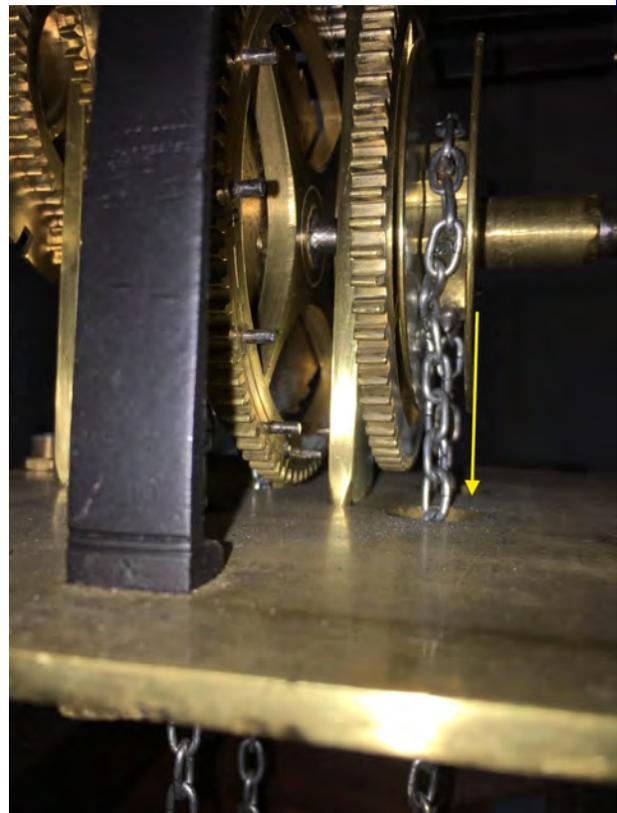
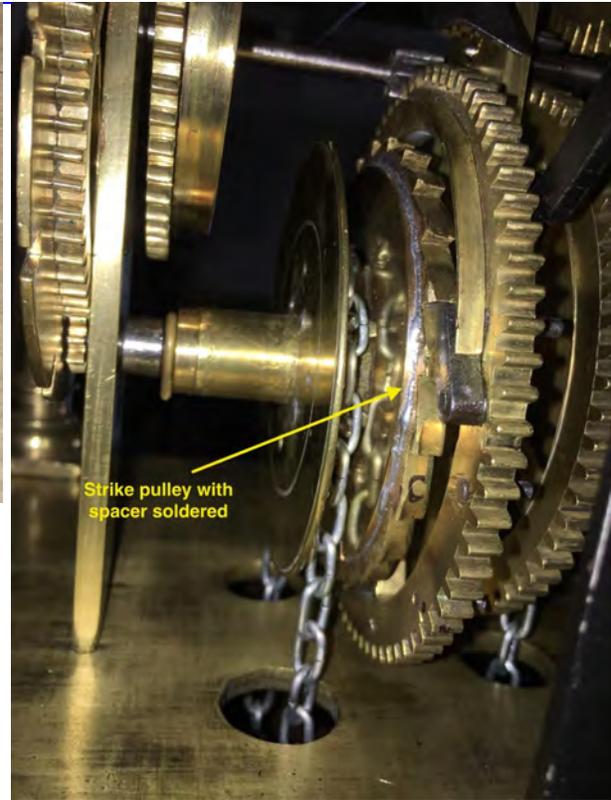
I started with the Strike pulley and added a spacer to just one side, as the pins were not exactly dead-centered in the pulley.

On the Time pulley I added a spacer to each side of the cheeks, but had to be careful of the spacing getting too narrow and binding up the chain. A few pins were filed to be a tad more narrow as a precaution.

Both pulleys had to be disassembled to allow the spacers to be soldered in position.

The clock is back on test as I write this, so perhaps there could be a happy end to my story. Keep your fingers crossed for the old clock.

Jim Duncan  
8 July 2020



## Fixing Clocks For a Hobby

Phil Keys



I'm busier than ever fixing clocks for friends.

The story continues about the Haller Art Deco mantle clock that I talked about last month. I've worked on it for now (yes) yet another month.



To test the clock I planned to run it for a week installed in its case. It ran ok for four days and then the chime stopped striking. I fiddled

and fiddled with it, running in the case and on the test stand. If I ran it in its case and took out the movement when the striking stopped, the chime started running again. Finally after several days the chime stopped on the test stand. Poking at the gear train I found that the 4th wheel was bound up. As soon as I disturbed it the chime started running again. This was all very frustrating. Finally I bit the bullet and disassembled the movement and looked at the chime train wheels under a microscope. I found a pivot on the 5th wheel that was tapered instead of straight. Probably because I didn't hold the stone level when I polished it. Was this the culprit? Was the wide part of the taper working its way into the pivot and binding the wheel? Only one way to find out.

I reassembled the movement, adjusted the linkages and got the chime barrel in sync. Getting everything working again was a lot more fiddling. The movement went back into the case and its been running OK. First I ran it partially wound thinking the problem has only occurred when the mainspring was run down. No problem, the chime train ran until the mainspring was wound down. It would

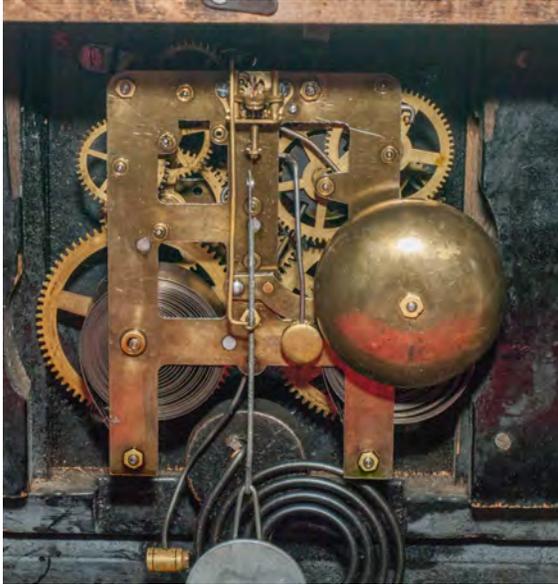
start again with just a touch of the winding key. Then I fully wound the mainspring and started it again. Its been running OK for a day now, just six more to go. Keeping my fingers crossed.

Now to the black Waterbury mantle clock with a kitchen clock count wheel movement. It strikes the hour on a gong and the half hour on a bell. An interesting thing about this movement is that the plates and bell are brass plated steel and there are what appear to be factory installed bushing that are thicker than the plates. Also both winding arbors wind counter-clockwise. The owner was warned to not wind clockwise and break the fragile clicks.



On the back were two stickers from clock-makers who serviced the clock, the last in 2015. Also there was *My Old Clock* instructions.

The movement was drenched in oil. Almost all the factory bushings were worn including those for the winding arbors. Bushing the strike arbor busing was interesting in that it also had a slot for the count wheel. The pivot hole part of the bushing only extended half



"MY OLD CLOCK"

MY OLD CLOCK TICKS QUAIN T AND LOW,  
AND TELLS ME THINGS I NEED TO KNOW.

WHEN WINDING ME, DON'T GO TO TIGHT,  
MOVE HANDS AHEAD, WAIT FOR MY STRIKE.  
TO TURN LONG HAND BACK, IS VERY BAD,  
SOON YOU WILL KNOW I HAVE BEEN HAD.  
WHEN I'VE RAN DOWN, TILL OFF IS CHIME,  
MOVE HOUR HAND TILL I'M BACK IN TIME.  
WHILE MOVING ME, AND IT'S TIME TO GO,  
TAKE MY "BOB" GOES "TO AND FRO."  
FOR FORTY MONTHS, I'LL TICK AND TOIL,  
THEN AFTER THAT, PLEASE CLEAN AND OIL.  
CARE FOR ME TILL YOU ARE OLD AND GRAY,  
FOR YOUR SONS AND DAUGHTERS,  
I'LL TICK AWAY.



way through. I had to match that to keep the same end-shake. I bored it out with a 5mm end mill and turned a bushing of the right

length to fit.

Reassembling the clock entailed adjusting all the kitchen clock internal levers. None were close to correct which required lots of bending and re-bending.

The paper dial was covered with cloudy and cracked celluloid. The cracks caught the hour hand so the celluloid was cut off. The paper dial was then sprayed with two thin coats of lacquer.

The clock ran for a week and was returned to its owner.

To be continued.

Phil Keys