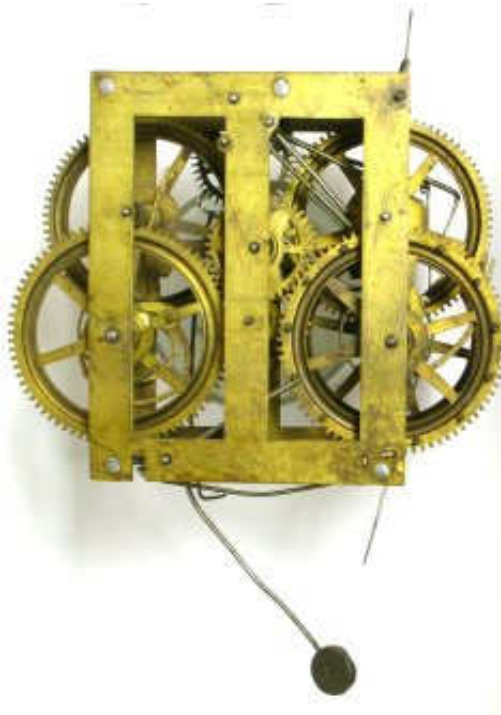
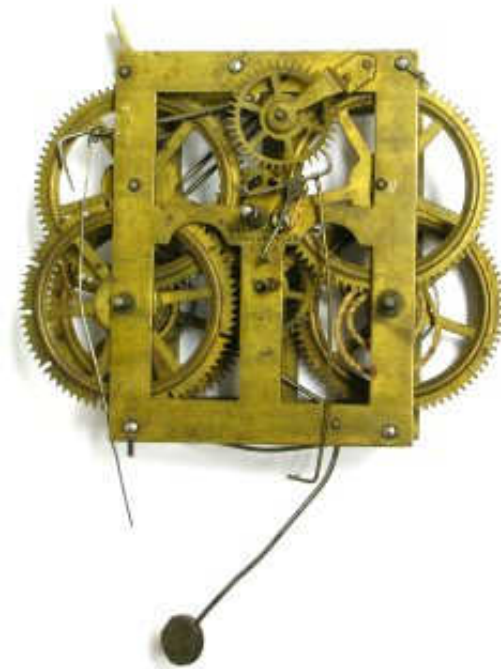


# Seth Thomas

The Seth Thomas thirty-hour, weight-driven mechanism, found in their OG and column clocks, is probably the best mechanism for someone wanting to learn about clock repair. It was well made, relatively simple, and easy to work on. Furthermore, these clocks have survived the test of time well. Despite their age (1845 - ca. 1900), there are many of them around in good condition, and they can be found for very reasonable prices, considering they are now antique.





As I have described in other parts of my website, the clock should be cleaned after disassembly, with or without polishing the brass, while paying particular attention to the bushing holes. Each pivot should be polished using a lathe and a pivot burnisher. You can see a list of available tools in my essay about Clock Tools. After repairing the clock, polishing pivots and replacing bushings as needed, assembling the mechanism can be challenging. Use a pivot locator to guide each pivot into place, which you can find in my list of clock tools, or you can make your own in a few minutes.



Assemble to lower end of the mechanism first, inserting tapered pins into the lower posts, and work your way up, guiding each pivot into its corresponding bushing with your pivot locator.



After you assemble the mechanism, you want to check the relationship between the gears in the strike train. At the moment the stop lever (known formally as the detent) enters the slot in the cam,



the hammer for the strike should just have been released. The strike should not stop as the hammer is being lifted. You make this adjustment by removing a tapered pin from the nearest post and prying the plates apart, just enough, so that you can take one pivot out of the bushing for the second wheel, then rotating the first just enough to release the hammer. Put the pivot back into the bushing and check the relationship between the gears again. Sometimes you need to make this adjustment several times before you get what you want.



Finally, you check the governor. The warning pin on the governor should rotate by half a turn when the detent is lifted out of the cam. The warning pin strikes the warning lever.



One detail that is often overlooked is the suspension spring. These clocks often came with one-piece, like the one in the bottom of the next photo. These suspensions do not have good elasticity in their springs, and should be replaced with a three-piece suspension, like the one in the top of the photo.



This description does not include every detail of what is involved in servicing a clock, but will hopefully motivate any hesitant hobbyist to consider taking the next step in a fascinating hobby!



Mark Headrick