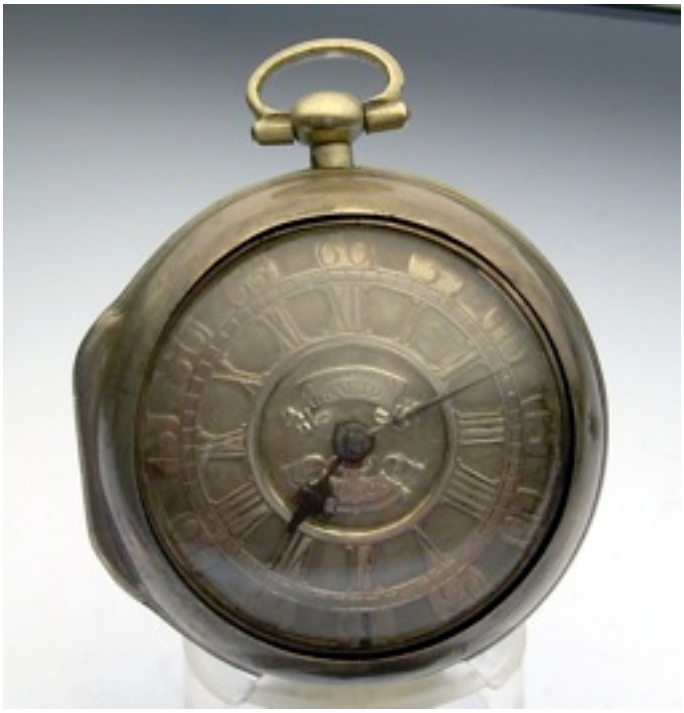
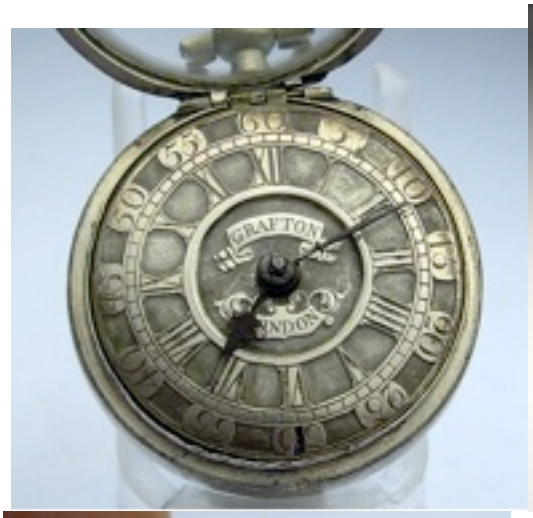
Grafton Verge Fusee Restoration
Ca. 1760

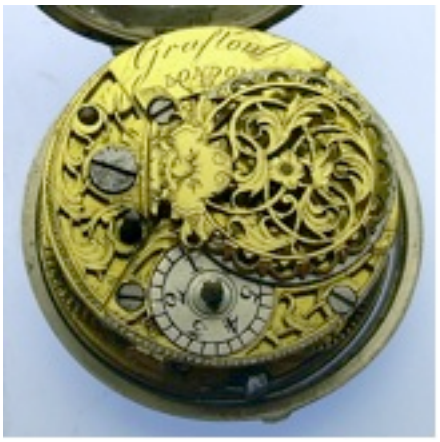
The following shows some the restoration work involved of an early English Verge Fusee watch. The owner of the piece is a watch collector but not overly familiar with the early English workmanship and entrusted me to bring the watch back to good working order and detail the case, dial, hands as best possible.



Upon initial examination of the watch, I found the piece to be reasonable well preserved, but with some mechanical wear and some cosmetic issues that could both be resolved. The case, silver hallmarked, showed a lot of wear (through), some repairs from the past using lead based solder, making it rather difficult to do anything with it, sort of re-shaping (tapping out dents) and polishing.

The following images are of the watch as it was received.





Mechanical Restorations:

The watch was dirty, having a lot of dust and lint as well as years of dried oils and greases. The movement would have to be completely cleaned before any further assessments were made.

Following the cleaning, it was found that the crown wheel for the verge was showing a pivot having extensive wear. This needed to be re-pivoted. The fusee ratchet teeth were somewhat worn and the click was very loose. The teeth of the ratchet wheel were reshaped and the click was also reshaped and secured. There was some additional wear to some of the pivots, but most were addressed with a stone and burnished to bring them back into shape. In addition, some of the steel-work in the watch showed corrosion and this I detailed, polished and cleaned, including screw heads and such.

Cosmetics:

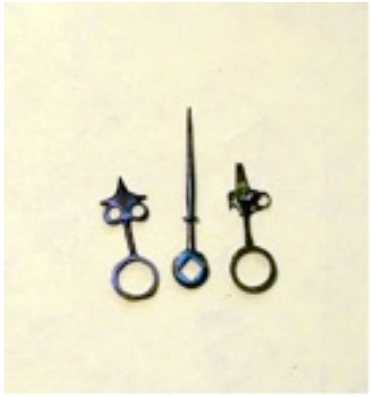
As mentioned earlier, the case had seen years of wear. In some places, the case back showed almost no metal. Some areas were patched from the inside with a strip of silver and attached with lead solder…..something I hated seeing. Needless to say, the case would stand up for many more years, but the execution of this type of repair was less than adequate. The hour hand was in rough condition, having been broken in the past and repaired at least once. I deemed it best to start from scratch and fabricate a new hand using the remnants of the old hand as a guide. The dial was in good condition, showing only tarnish and some “blackening” material missing from the numerals and signature.

Here are a couple of images of the hands before, during (fabrications) and after.

1. I turned a piece of steel in the lathe to match the rough shape of the original hand.

2. Then the hand is held in a woodblock with shellac while the top surface is filled flat. The hand is then removed, flipped over and the filling is repeated on the bottom.

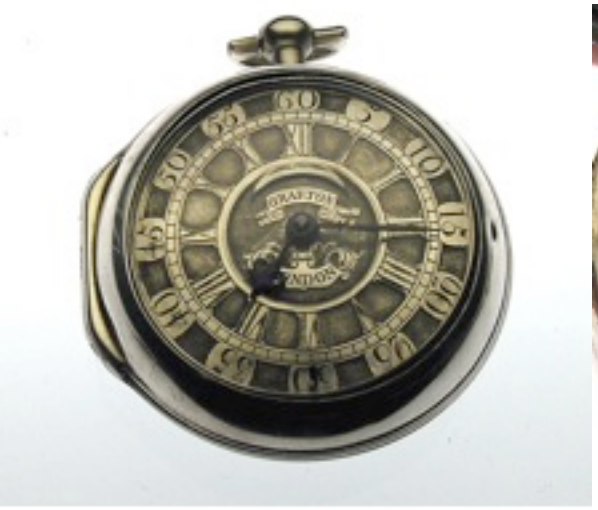
3. Then a hole is drilled that will allow the hand to be fitted onto the hour wheel of the watch and then the hand is finished with a file to contour the edges. Lastly, the hand is blued to match the existing minute hand.

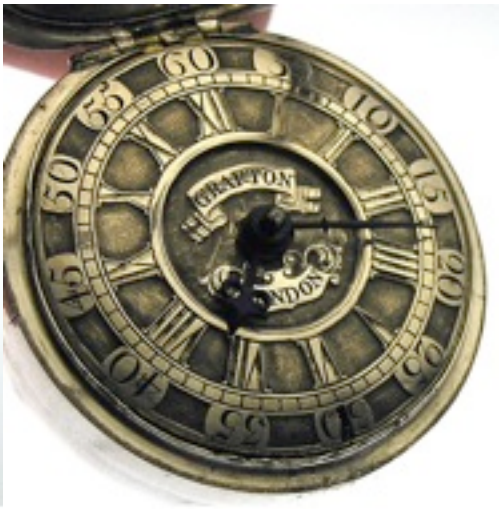


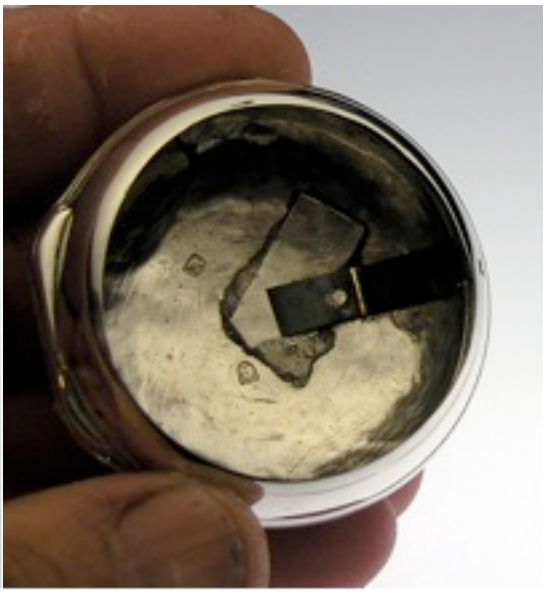
The case dents were then tapped out, all surfaced were detailed with polishing compound and the dial was cleaned, lightly polished and the engraving filled with black. In addition, I also fitted the case-back with a new steel catch-spring as the old one was no longer doing its job.

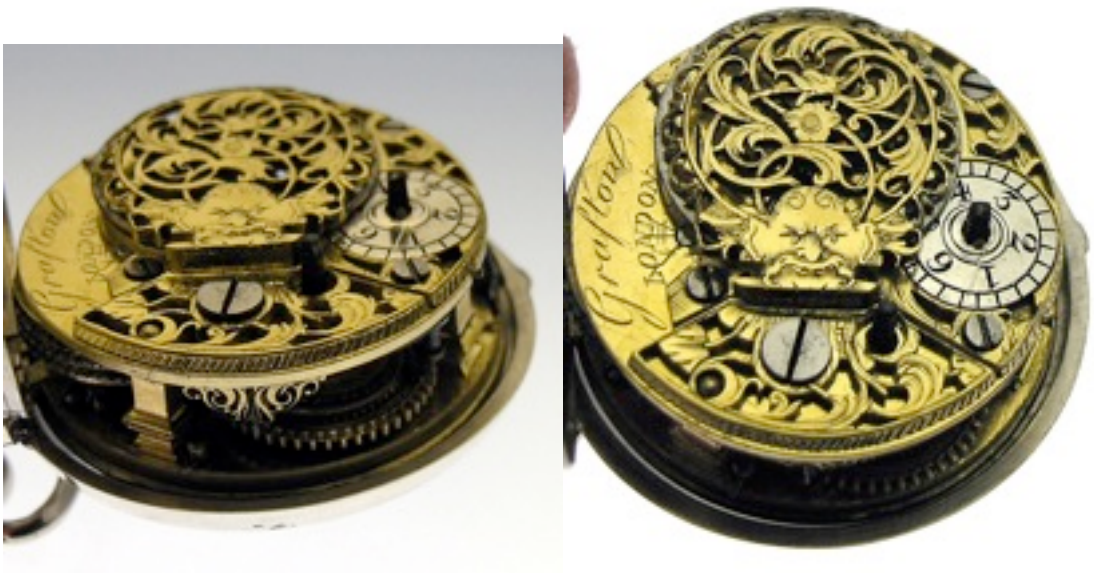
Once all the necessarily repairs were made, the watch is then re-cleaned and assembled with a new mainspring and the watch is tested.

The Finished Product

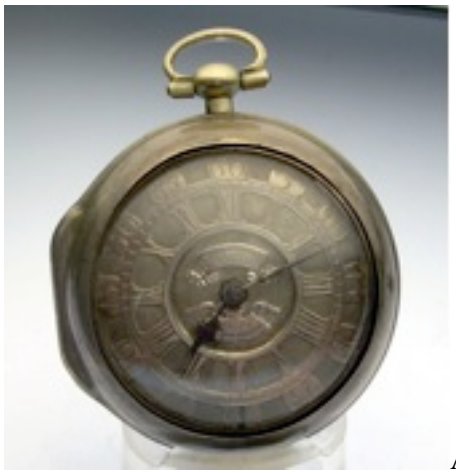








The watch timed out exceptionally well for a piece that was over 230 years old. The customer was extremely pleased with the results. (Please see “Customer Testimonials” John and Mary W.)

Before: 

After: