

The place to come for all your Bulle and Eureka restoration parts. Contact Peter Smith Telephone 01454-880825 Or Mobile 07969-773480 Email peter_smith@horologix.com

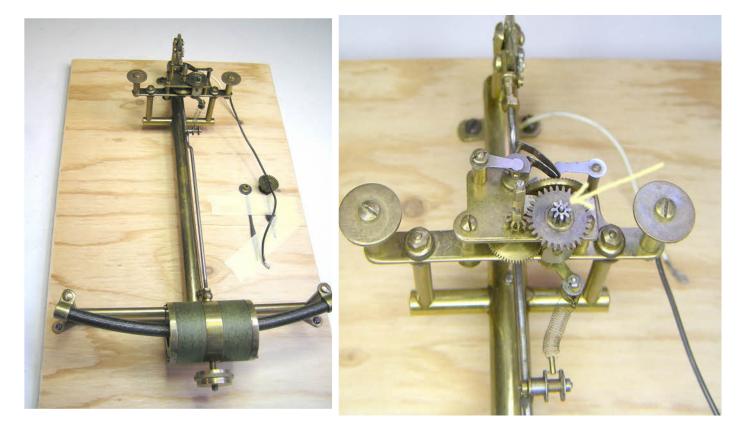
Bulle Clock Serial Number 19185

Restoration of Bulle Clock Serial Number 19185



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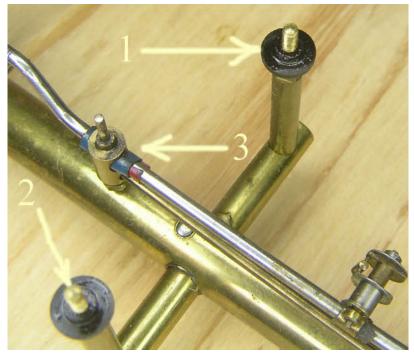
This clock has been delivered well secured to a plywood base. But without the case or dial. The first thing to note is the discolouration of the cord. This looks to be either oil contamination of some form of waxy substance. We'll remove this and rewind with new cord. The second thing is that the intermediate wheel arbour is missing it's retaining collar and it stands rather high near the end of the arbour. This will have to be investigated. The last photo shows the rating nut has had

the centre drilled out to try and reduce the weight. This means we need to investigate why this has been done (usually for no reason other than the clock could not be adjusted correctly due to dirt or bad contacts somewhere) and also we will have to repair the nut. Page 1

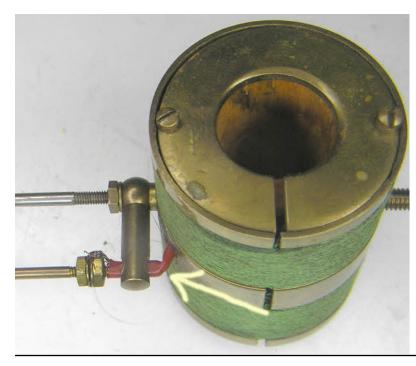
Restored Bulle

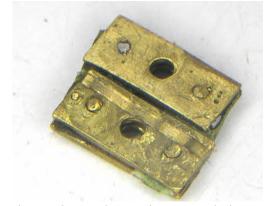


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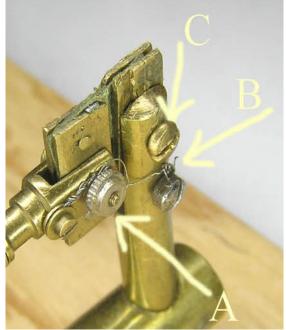


Note the oil saturated insulating washers at 1 and 2. These will be thrown away and replaced with new ones. The insulating fibre sleeve (3) which isolates the silver contact pins assembly is also missing and has been replaced with what looks like two pieces of blue and red plastic.





The photo above shows the mangled remains of the suspension which has been roughly riveted back together with one of the chops "inside out". You can see the slot where the strip of lead should be.



The suspension assembly is also in need of some "TLC". The screw and nut at "A" and "C" are wrong so I'll turn up new sets on the lathe. The contact wire is too short and attached to "B" instead of "C". The photo left shows evidence that the coil has been tampered with., but it still reads a good 1100 ohms. Hopefully only a minor repair required to the lead out wire.

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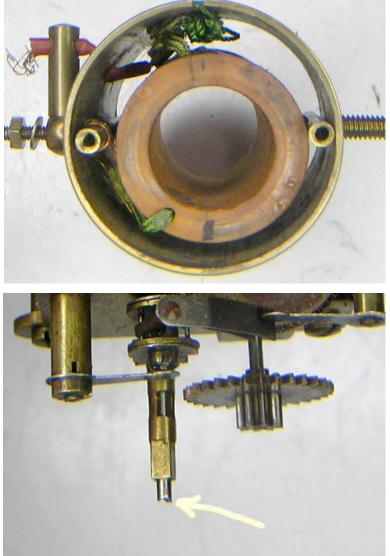




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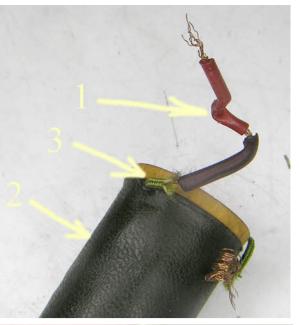
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This photo above shows the centre minute arbour has broken off at the point where the pin hole has been drilled through. This has probably happened through excessive force being used to drive in a new pin. We will have to see if there is enough of the arbour left to clean it up and drill a new hole further down. It may necessitate removing a small amount of the collet behind the minute hand.

This last photo to the right shows the badly damaged top suspension slot. We'll need to straighten this to accept the new suspension unit.

Although it is not clear in this photo the lead out wire to the rear brass pendulum rod is broken and the copper wire has the opportunity to short on the casing. The common wooden bobbin is quite clearly shown and looks to be in good condition. The rims can sometimes be cracked and splintered. The photo below shows that the original coil cover (2) is still in situ and looks undisturbed. The original lead out (3) has had a new piece badly joined to it under the plastic sleeve (1). This will all be replaced.



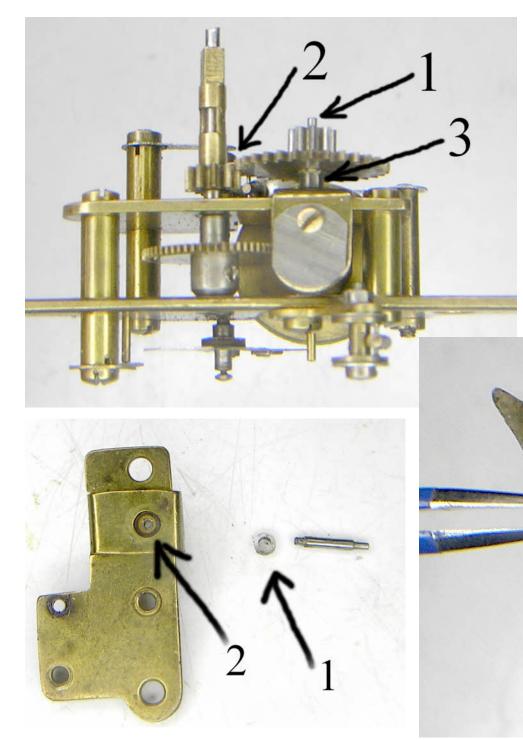






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As seen earlier the intermediate motion wheel seen here is rather high on its arbour. There is hardly room left to fit the missing collar(1). At (2) you can see that the wheel is only just engaging the canon pinion. All this seems to be because a small steel collar (3) has been fitted on the arbour upon which the wheel sits. This looks rather dubious and we shall remove it and check how the wheel sits. The rest of the movement looks to be in good condition.

Once the movement has been stripped we can see the culprit. The small steel washer (1) was floating on the arbour (2) and I cannot see any reason for it.

The contacts on the fork are well worn. The silver contact has even worn down the rivet and the steel fork wing. The fork will be replaced.

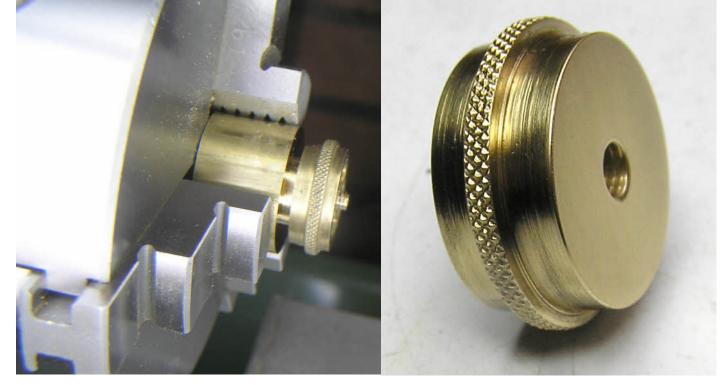
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The rating nut mounted on an a brass threaded mandrel ready for turning down. The drill holes are slightly deeper than the knurled centre ring so I will extend the bottom half slightly to compensate. The photo top right shows the finished nut.

The stages in replacing the fork. The existing arbour is in good condition. It's just the fork that is badly worn, so the old fork is removed and the spigot on the arbour turned down to the diameter of hole in the new fork. The new fork is then riveted on and checked to be both secure and tight. The final photo shows the two new contacts, one of silver the other of fibre, riveted in place and ready to be filed down to their working size and shape.



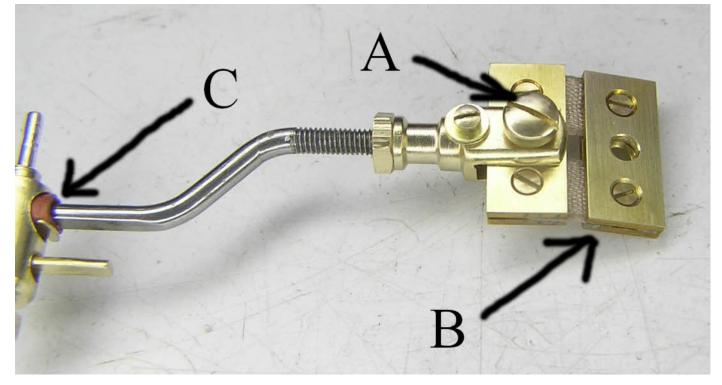






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The new parts "A" and "C" fitted to the pendulum together with the new silk suspension "B".



The pendulum coil casing rebound in cord with the rating nut in place. This nut is unusual in that it has no quarter cuts around the circumference. I have come across a few of these nuts with exactly the same size and characteristics so I see no reason to suggest that they are anything other than original.

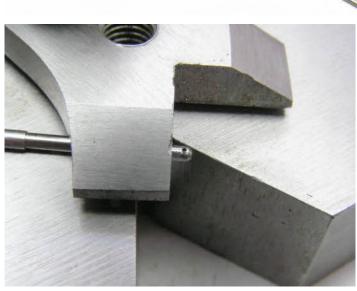


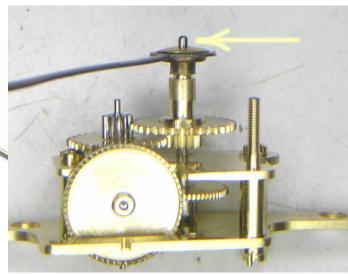
The new set of insulating washers ready to *fit*.

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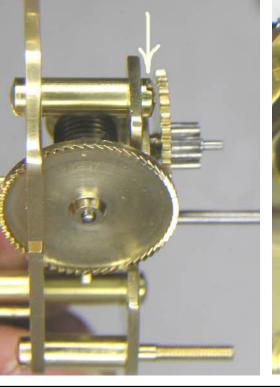


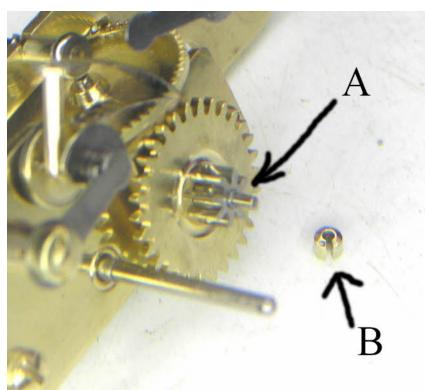
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The photos above and left show the stages in drilling the new pin hole in the minute arbour. We had to reassemble the movement to check there was enough of the arbour left to accept the hole (arrowed above). Below we see the ample clearance for the intermediate wheel (arrowed bottom left) now the steel collar is removed The new brass retaining collar is shown "B" ready to locate on the arbour "A".



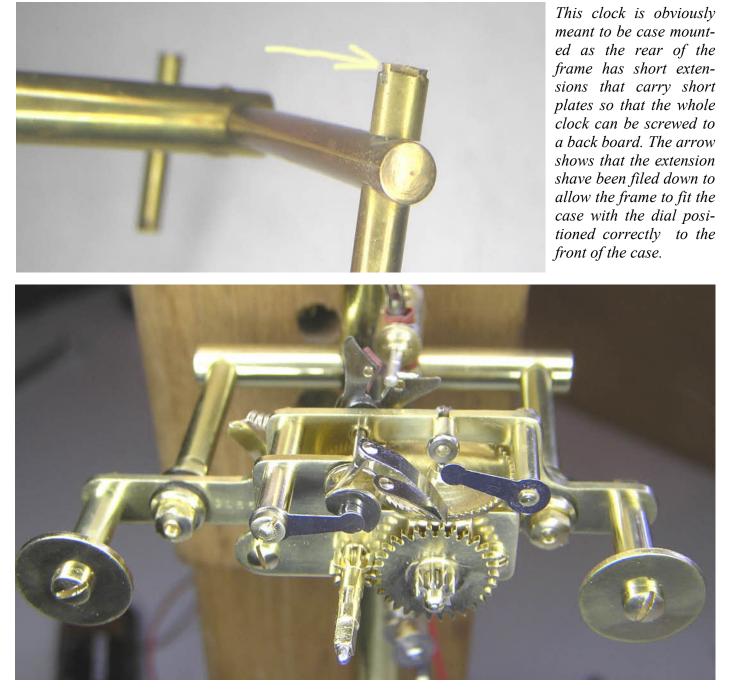


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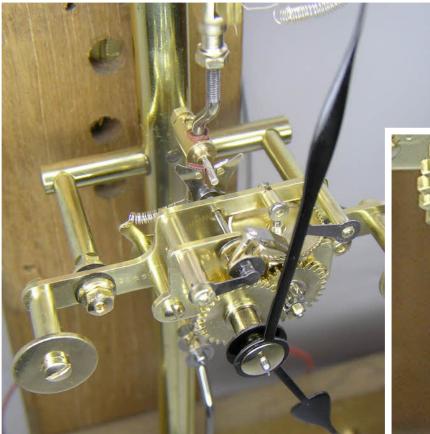
The movement and pendulum fitted back onto the frame for testing alignments and contact pin depths. Note that the depth and front to back positioning of the intermediate motion wheel is now correct At the rear you can also see the new contacts on the fork arbour. Note the finished shape and height above the fork itself. They are only just sitting proud by approx 0.20 mm.



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The suspension assembly in place with the correctly positioned contact wire. Note also the suspension mounting slot in the frame has been straightened and tidied up.



The photo at bottom left shows the movement with hands and collet in place ready for testing. The last photo shows the hand collet in more detail. The pin is centred and a snug fit leaving plenty of metal in the arbour for strength.



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Page 1

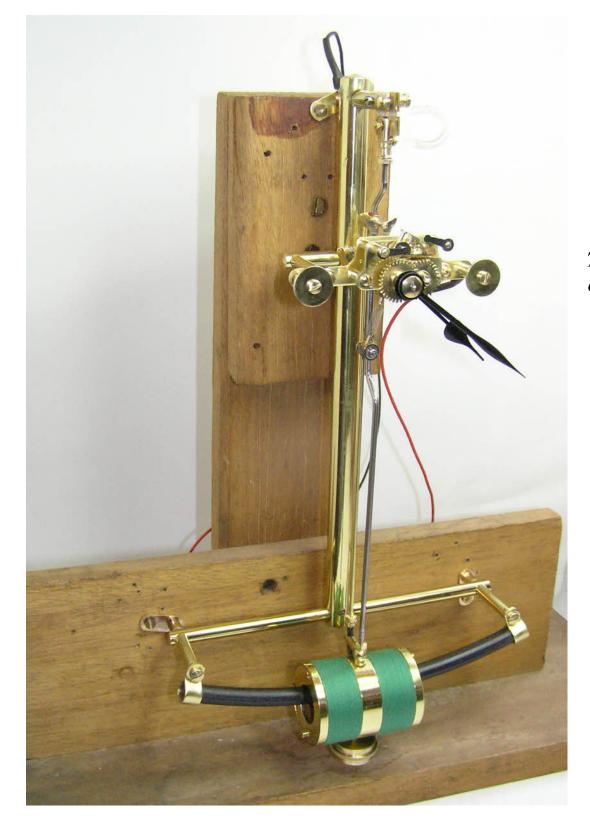




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The finished clock on the test stand.