

Restoration of Bulle Clock Serial Number 11536.







This restoration by courtesy of the owner.

This clock is a tall movement from about the second year of recorded production. Not much has changed although the hands are of the fine spade type instead of the moon style. They look to be original with the clock. The rest of the clock looks to be pretty standard with no modifications or add ons that we can tell at first glance. The dial is certainly in fine condition with no major marks or stains.









abrasions and dents. It is just a little to far gone for a clean and a coat of wax so it will be cut back and French Polished. But I'll keep as much of the character as I can by only removing the polish and leaving as much of the surface colour and patina as possible including the lumps and bumps. A worrying aspect can be seen when the main frame of the clock is removed. Note the six screw holes when the column only has three! This mean that the clock has been apart sometime in the past and for some reason it was decided to move the column ring around. Maybe there is a broken screw in the wood somewhere. Either way it

means there may be other problems ahead.

The Base is somewhat tired with various









There are some problems here. The first photo shows the state of the pendulum bob. The wire is sleeved in modern plastic so the coil has probably been messed with. The cord is discoloured, stained and very brittle where the darkest areas are. It may have had some solution dropped on it at some time. Another one of those decisions to be made as to whether it will survive cleaning. We'll see.

The tube has battery acid burns which in some cases have burn through to the outside, but I don't think it is that bad. They certainly don't look as though they are much more than pin holes. There should be enough material left to take the cleaning but some marks are inevitable on the outside when cleaned and polished. The last photo shows the magnet support pillars that sit in the wooden base. They have been hammered flat for some reason. Probably to make them a tighter fit in the holes. They will have to be sorted out before the washers can be removed.

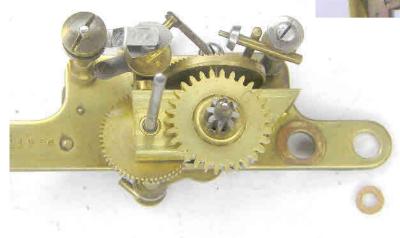
The magnet is a big giveaway. I've just checked it and it has only North and South Poles. So someone has re-magnetised it but did not understand the working of a Bulle.





The suspension is broken as usual but the rest of the assembly looks complete bar the two blued steadying screws. which will have to be made.

The photo at right e shows the movement, dial and hands in situ and all look to be in good order. Nothing seems to be missing.



This is interesting though. When the movement was removed from the frame the outside holes which hold the dial support pillars and much bigger than need to be and have fibre spacers inserted. They look original so it may be that this movement was intended for another role.



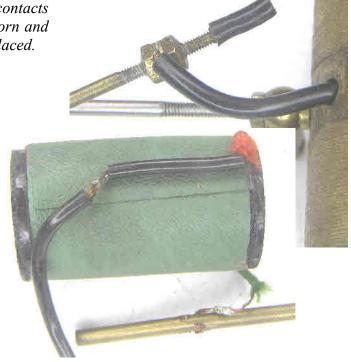


Oh dear. The pawl arbour seems to have a small problem. It is in two pieces. The main part has been drilled out to accept the end piece which must of broken off when the pallet assembly got stuck when it was being removed. This type of break is typical when the assembly is forcibly removed. If the proper tools are not used then undue pressure is applied to one side of the arbour and, being hardened steel, it snaps.. We shall have to see what can be done here. The repair is not a bad one and may be re-usable.



The fork contacts are well worn and will be replaced.

The last two photos show the coil and it's wiring. It can be seen that it has indeed been removed and modified in the past. On end has been soldered to the spacing tube instead of being wrapped around it. The other end has been lengthened by soldering a new piece of wire on. But the joint has been left open!!. These modifications will be removed and replaced with new wire and sleeve. Luckily the coil reading is a good 1140 Ohms







The base after cleaning and French Polishing. There are about 8 coats on this base which have then been cut back to leave a nice lustre. Note in the top photo the indentations left by the brass nameplate which was missing when received.

The lower photo shows the replacement Horologix label. This one is the English version as dictated by the English Dial.





The column has been cleaned in the usual way with Horolene, White Vinegar and finally Bicarbonate of Soda to neutralise the acid.

It was then polished and lacquered. I found no broken screws in the six column securing holes in the base so I just chose the best sequence of three and used those. We are now ready to receive the pendulum and movement.

The photo below shows the new battery compartment cover. The making of this has been described before on clock s/n 6792 and will not be expanded upon here.

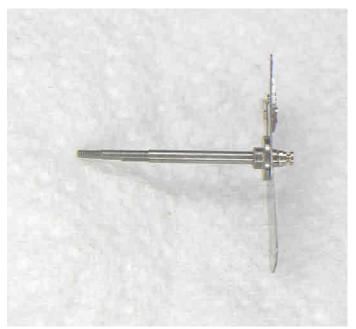






The base, Column and pendulum assemblies all re-united waiting for the movement. The magnet has been re-magnetised for the normal 3 pole configuration and reads a good 19cm on the magnetometer.









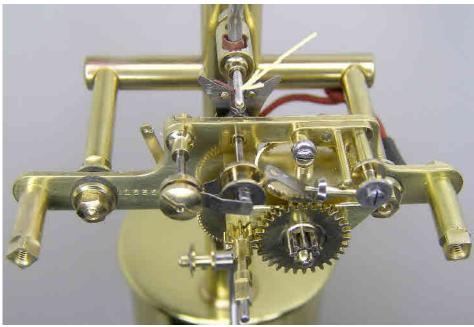
The photos above show the replacement fork arbour ready for installation. Note the small amount of overlap needed on the Fibre contact. This must exactly follow the line of the steel fork leaving ample room for the silver contact pin to freely engage in the fork cheeks.

At left is shown the arbour in situe with the impulse pawl engaged in the count wheel. The gathering pawl can now be fitted and the whole action tested to make sure that the pawls drive and gather one tooth at a time.







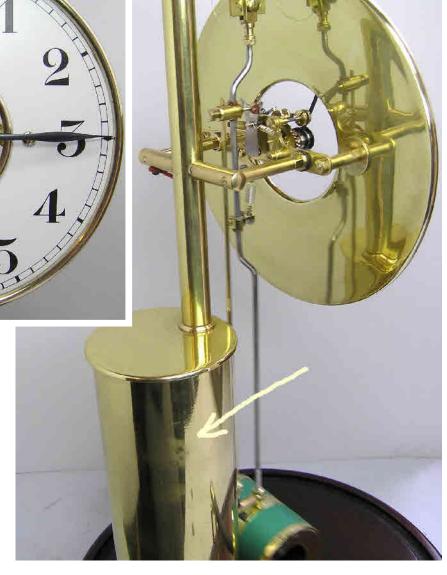


The photos above show that the contact pin is having great trouble reaching the fork. This was not noticeable when the clock first came in as the suspension was broken. How this could possibly have worked I do not know. The contact pins for Bulle's are different lengths depending on the model so, I'm guessing that the original must have broken and been replaced at some point. The photo at left shows the finished movement and replacement contact pin. (arrowed).





The cleaned and finished dial. Not much work was needed here other than the brass being cleaned and the dial washed in soapy water. The hands just needed a coat of was and a good buffing. The photo at right shows the back of the column where some of the battery acid burns have come through to the outside. They are not too bad and show only as pin holes on a dull area.







The finished clock.

This file was originally part of the Gallery on the www.horologix.com website.

It has been converted to pdf to facilitate downloading.

Copyright © 2006 Peter J Smith