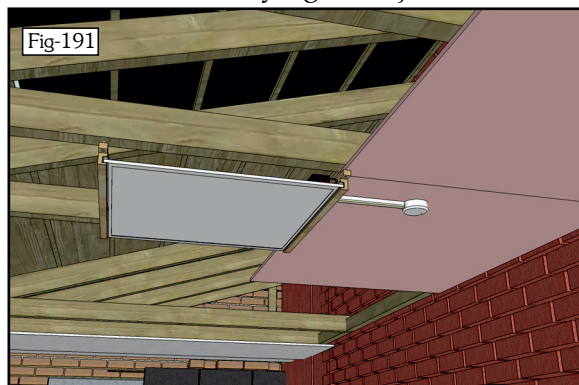


16TH JAN

Not a lot done to the clock since my last posting, my workshop lighting has been degrading for some time and although I bought new 600mm Sq. LED Panels in Nov.'19 I hadn't made the time to fit them. With the demise of two more 5' fluorescent tubes (or maybe 'starters') last week I really did need to make an effort. Since I'd bought 'bare' LED units I had to make 'fittings'. I knew what they would be - very simple 19 x 45 battens with 16 x 16 trunking set in a slot, screwed to the ceiling so that the LED Panel could be slid in from the end. Exactly the same as those I fitted to my new workshop in 2019.

Nothing 'fancy' but deciding what suitable materials I had was, shall we say 'fraught'! I eventually cut the battens out of some floorboard saved when I re-modelled my bathroom but I had to resort to buying some junction boxes to make the connection to the existing lighting circuit 'safe'.

I don't have a fear of electrics - just a sensible respect - but I don't find working on the ceiling at arms length from a small step ladder the most comfortable :(and just fitting one panel took me the best part of three days - I had made enough battens for all three lights though, and much of that time was spent in drawing the new LED fitting in the SketchUp model of my property/workshop. I like to know what I'm doing before I start! :)

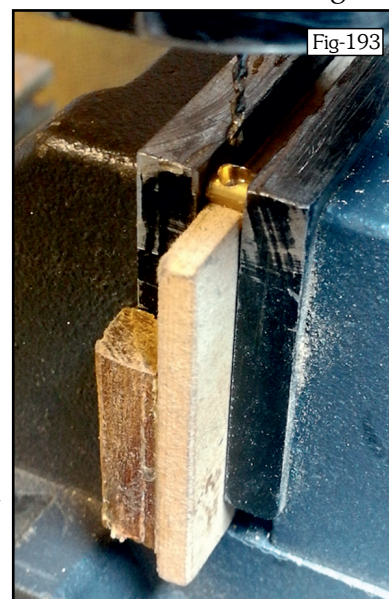


I eventually got back to the clock this afternoon but I've only made the Cord Ends from 4mm Ø Brass rod. These are quite small at 4mm long and have two holes - one at 1.3mmØ and the other at 2.7mmØ. Fig-192 gives a better idea when compared to a 5p coin.



To drill the holes I needed to make a jig which would precisely locate the small billets in the vice on the milling machine. A small scrap of thin MDF with another scrap of hardwood glued to it did all I needed to position the support in the vice and a 3mm deep slot cut with a ball nose 4mm Ø end-mill was enough to locate the brass billet. I had to change the drill without moving the blank of course but that's no great hardship.

Now the Cord Ends are made, I can get on with finishing the Winding Drums.



17TH JAN

The Cord will need to be about 1.5 to 2m long but I can't be sure of that until I have a fully assembled clock but I do need to start somewhere so I'll cut them at 2m.

It will be fixed to the Drum by inserting the brass End into a 5mm hole in the side of the Drum (Fig-194) with the Cord coming out of a 1.5mm slot. Keeping it in place will be an End Cap which is fixed with three wood-screws (2mm Ø x 6mm long).

Threading the 1mm Ø (nominal) Cord through the 1.3mm Ø hole proved to be somewhat daunting. In fact so much so that I gave up after nearly an hour of

trying various methods - using glue to keep the strands together, thin wire to bind etc. - and drilled it out to 1.5mm, but also widened the outside by using a centre-drill to provide a 'cone' which had a tendency to pull the fraying strands 'in' rather than push them out. I still had to make a clean cut with a scalpel though.

The Cord is polyester so once threaded through the small hole it becomes a simple matter of burning the end which melts it and forms a larger 'blob' to sit inside the 2.7mm hole.

The Endcap had to have the three screw-holes drilled & countersunk before being assembled to the Drum, after which I could run an 8mm Reamer through to clean up any minor irregularity and mount it on the spindle for final finish sanding, sealing, MC wax and polishing.



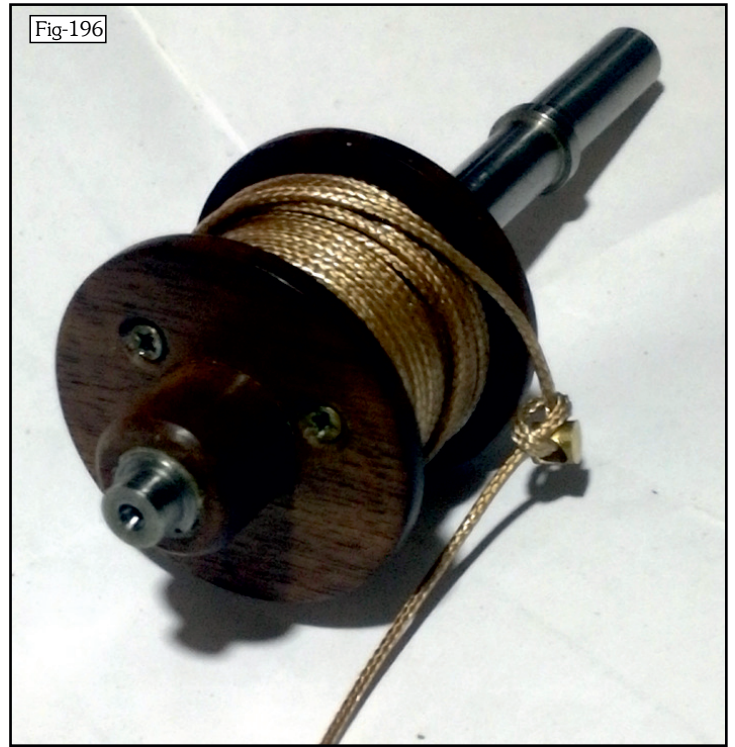


Fig-195 shows the part assembled Drum with Cord & Cord-End and in Fig-196 you can see the fully assembled Drum with the Cord wound on. The second Cord-End is threaded on but just held on the Cord with a simple knot. It can't be finished off until I've made the Eyelet that will be the top of the Drive Weight. I will have to 'un-wind' the Cord because the grub screw that holds it to the spindle is under it and I have to take it off the spindle to glue the Ratchet to the Drum and fit the Main Drive Gear.