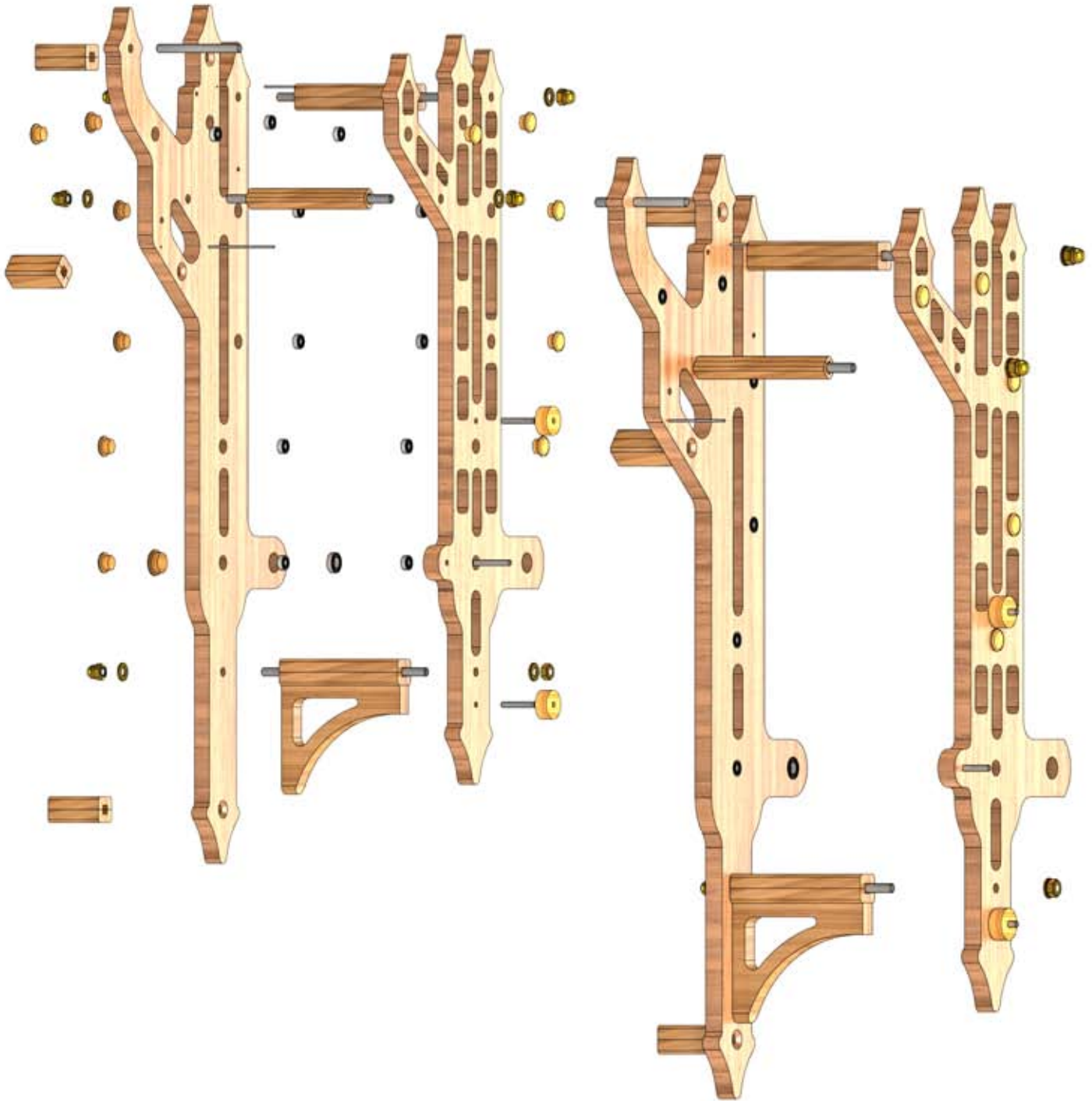


Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

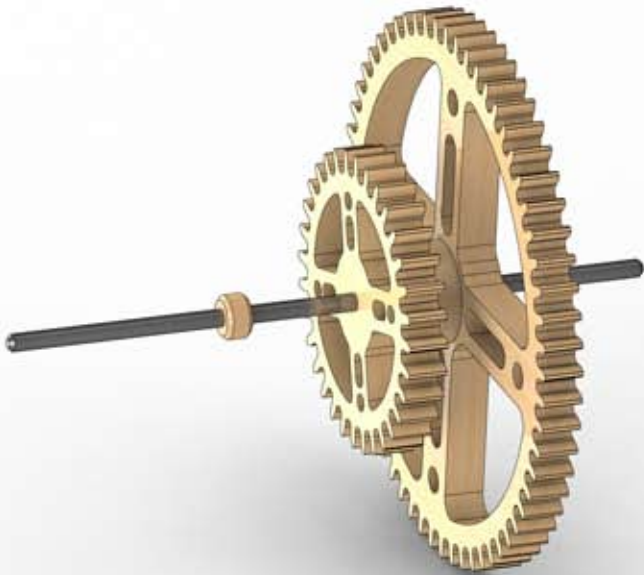
Stage 1 Assemble and glue all frame parts



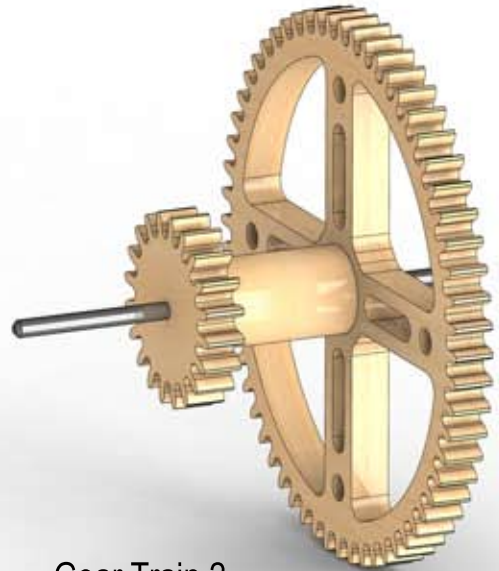
First stage is to fix and glue all the parts that are attached to the Front and Back frames. The bearing can be a tight press fit or be glued in place with Loctite. The Brace and the Spacers are glued to the Back Frame only. The wall spacers can be glued to the Back frame. Fit all pins threaded rods and nuts and washers shown.

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

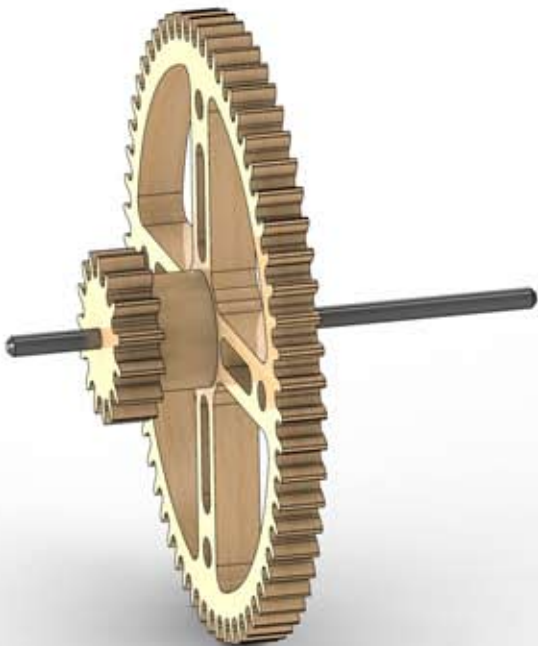
Stage 2 Assemble the 4 drive train gears .



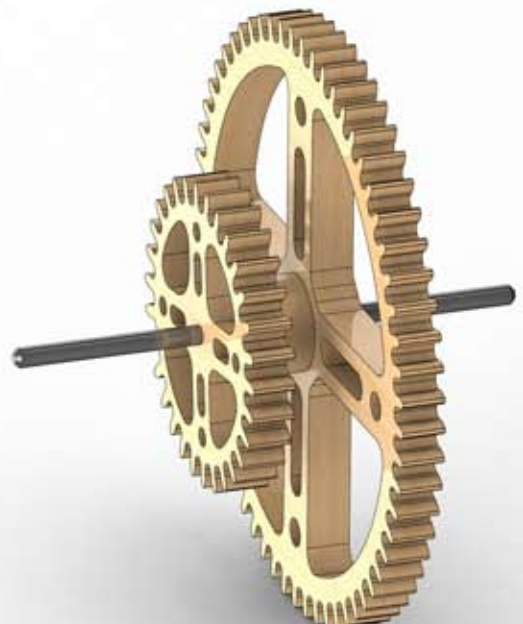
Gear Train 1



Gear Train 2



Gear Train 3

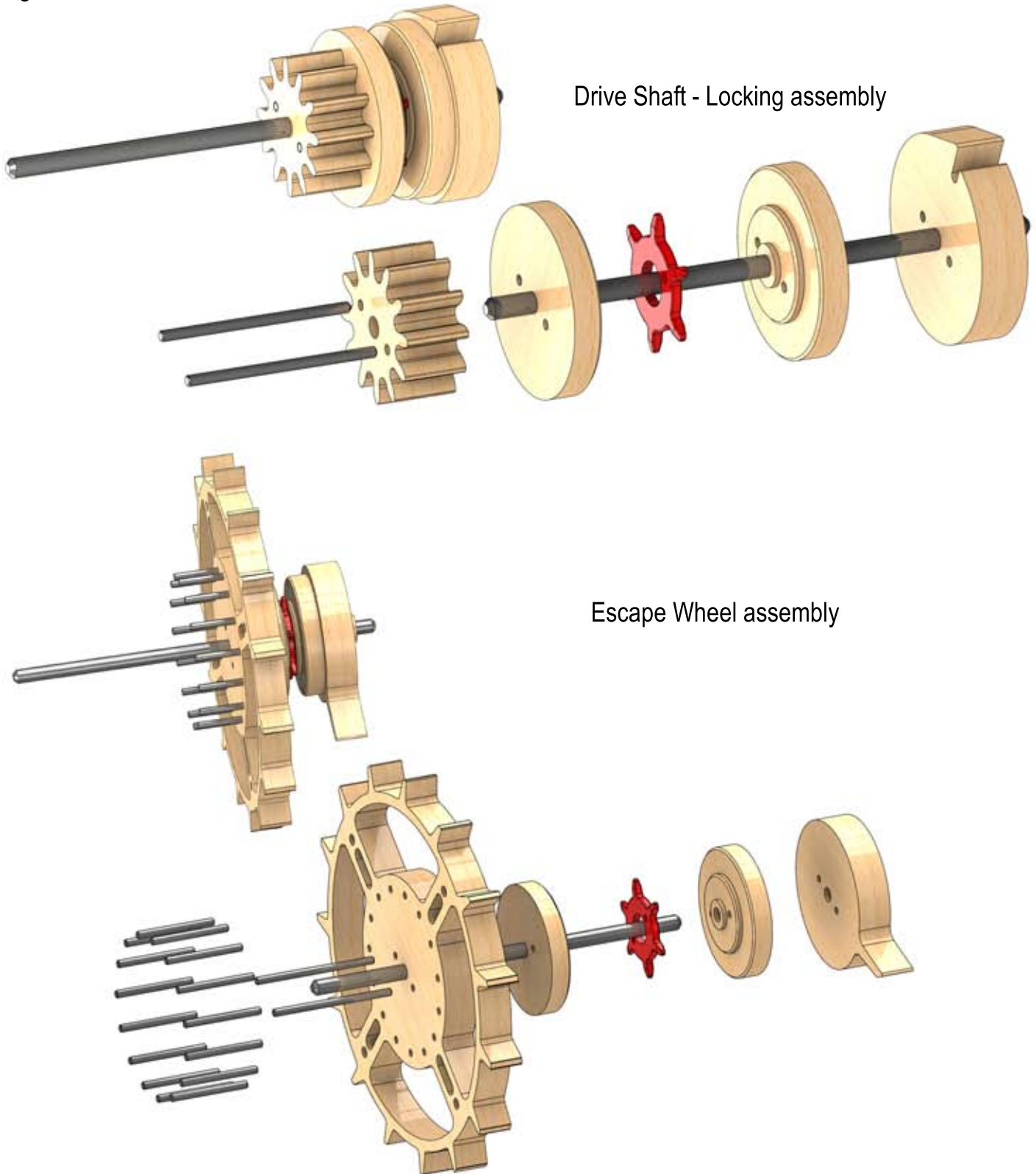


Gear Train 4

Assemble all Gear train Sub assemblies in accordance with the dimensions shown on the drawing Sheet .

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

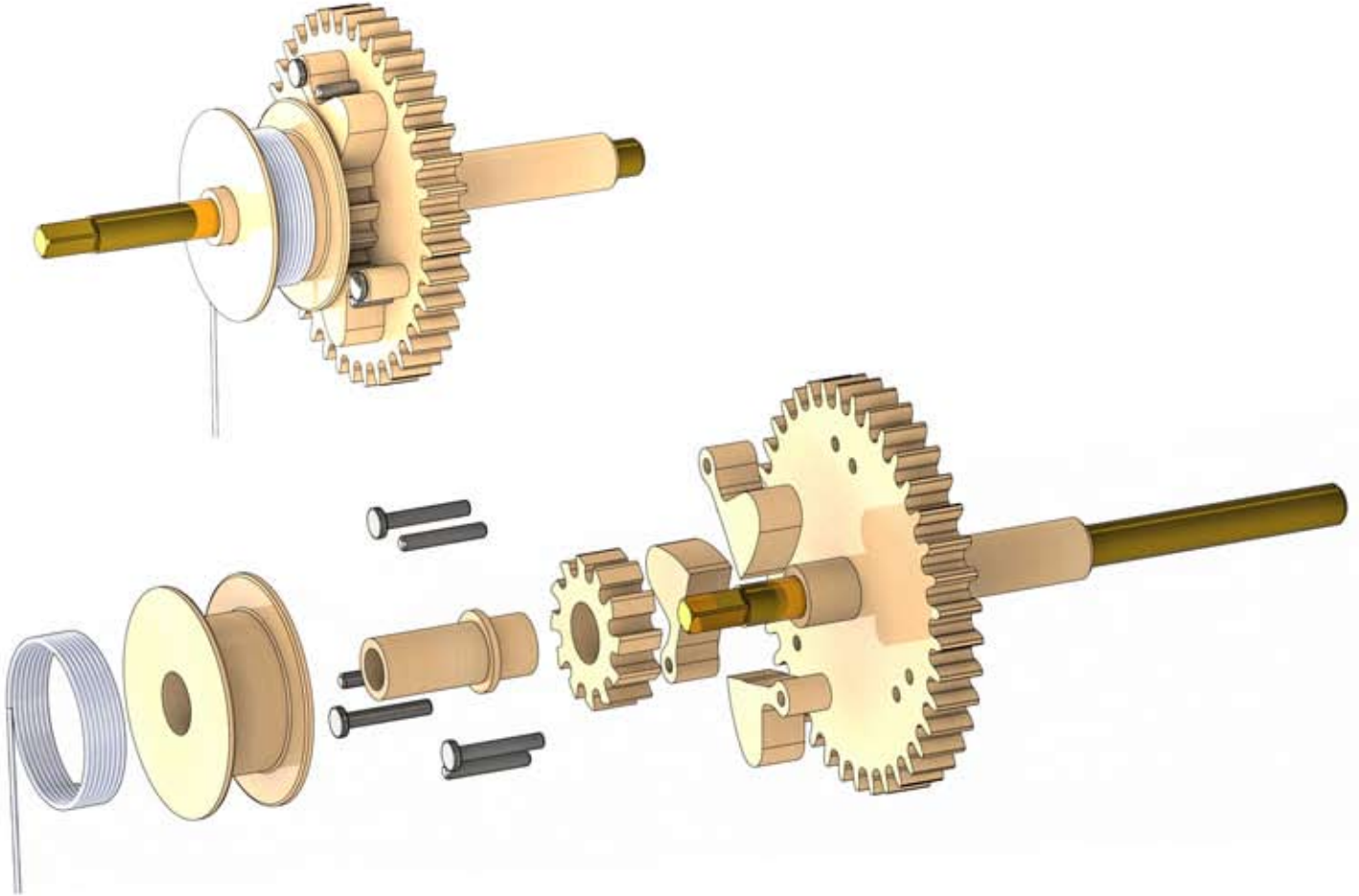
Stage 3 Assemble all Drive train sub assemblies



Assemble the Drive Lock and Escape gear assemblies in accordance with the dimensions shown on the drawing Sheet .

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

Stage 4 Assemble the Winder Shaft

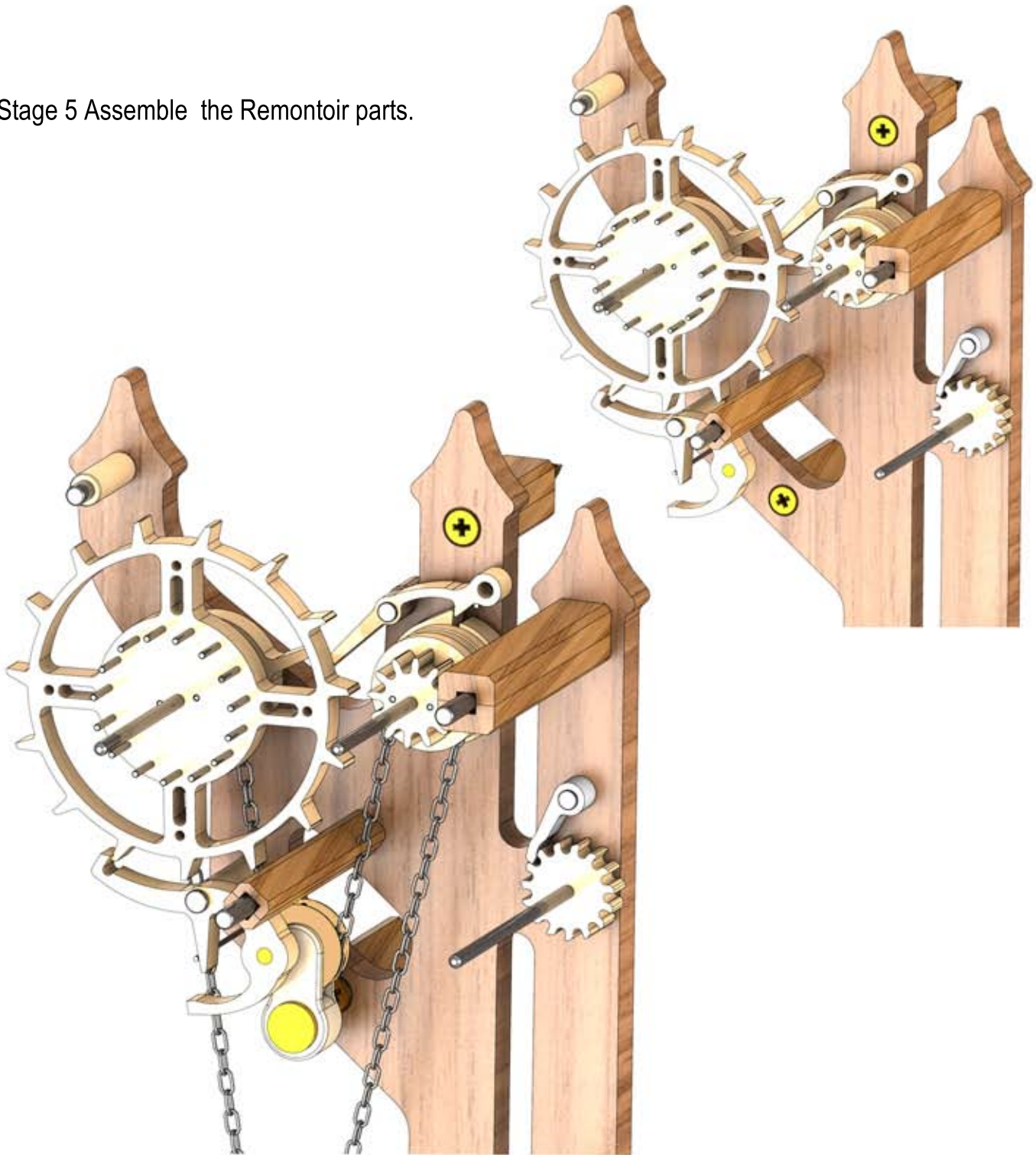


The Winder Shaft shown should have the Drum and the Ratchet glued onto the sleeve shown between them and then pinned to the shaft so that they rotate with the shaft.

The Gear is glued to its own Sleeve and should run freely on the shaft, The 3 Pawls are attached to the face of the gear with the headed pins, the other pins are fitted to prevent the pawles moving too far when they are turned to the bottom.

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

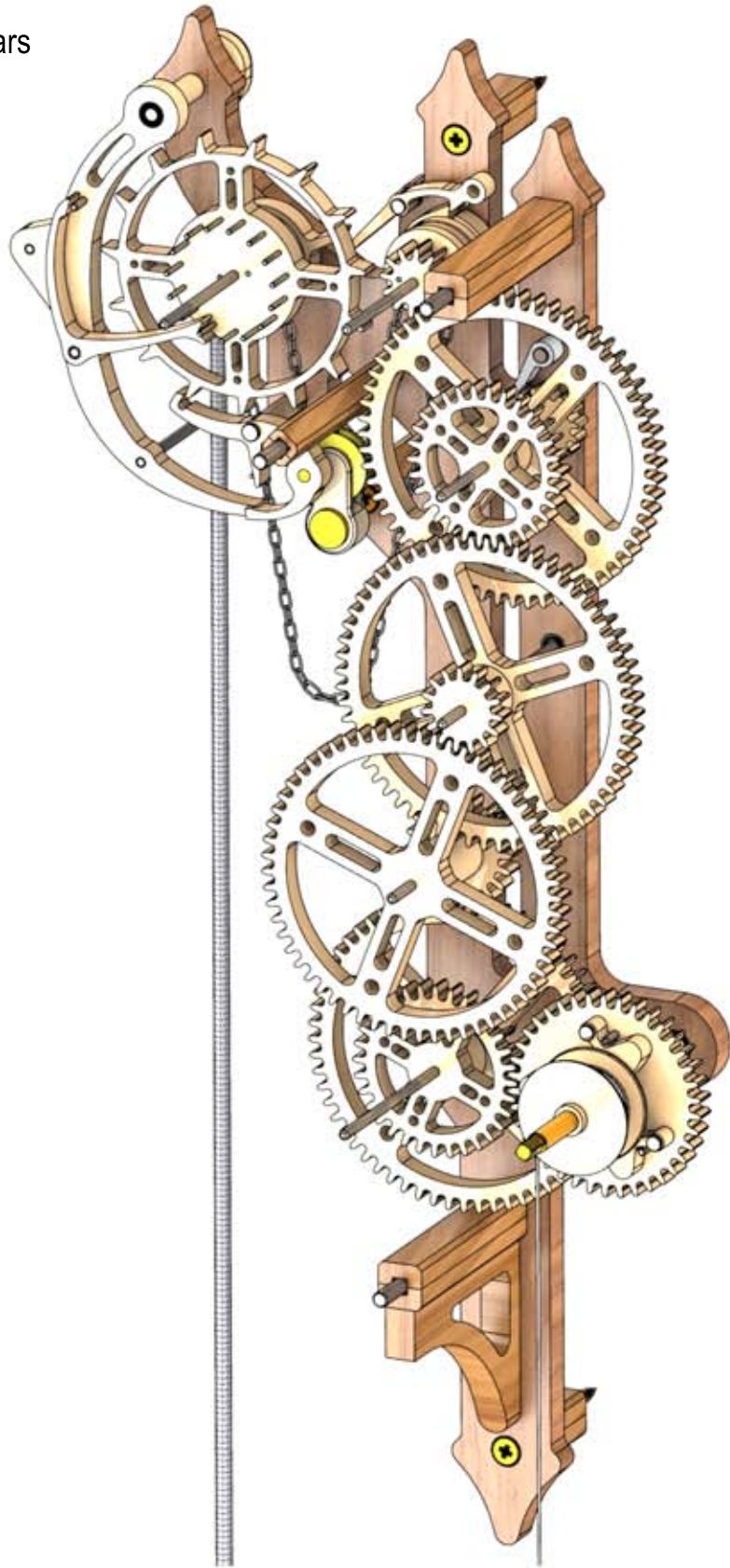
Stage 5 Assemble the Remontoir parts.



Start by mounting the Escape Wheel and the Drive Lock assemblies to the back frame. Now fit the Remontoire Pawl and its pivot and Stop pins, followed by the Trigger and its pivot and Stop. The small Pawl shown at the top right is to engage with the ratchet on Gear train 4 and is used to prevent the gear train being driven backwards when winding. Now cut the chain to length and thread through the Escapement weight and join the end links to form a continuous chain. Thread the chain around the gears in the manner shown above

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

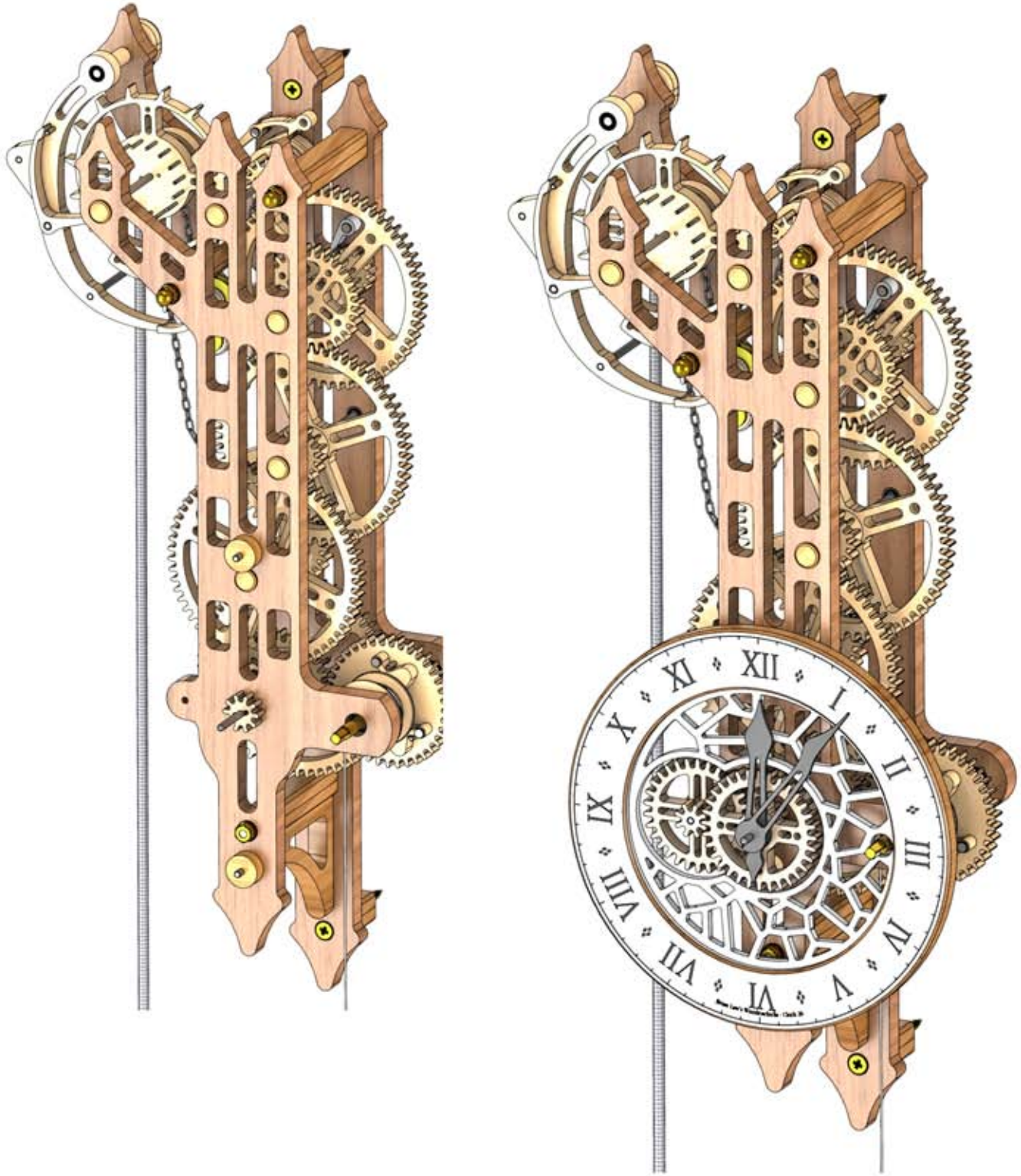
Stage 6 Assemble the Drive train gears



Mount the Gravity Arm and its Lifting Lever onto the pivot at the top left corner
Now fit the rest of the gear train assemblies to the Back Frame.

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

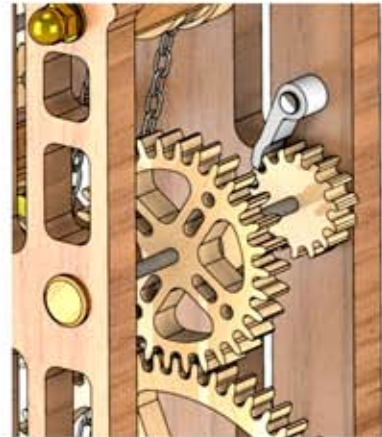
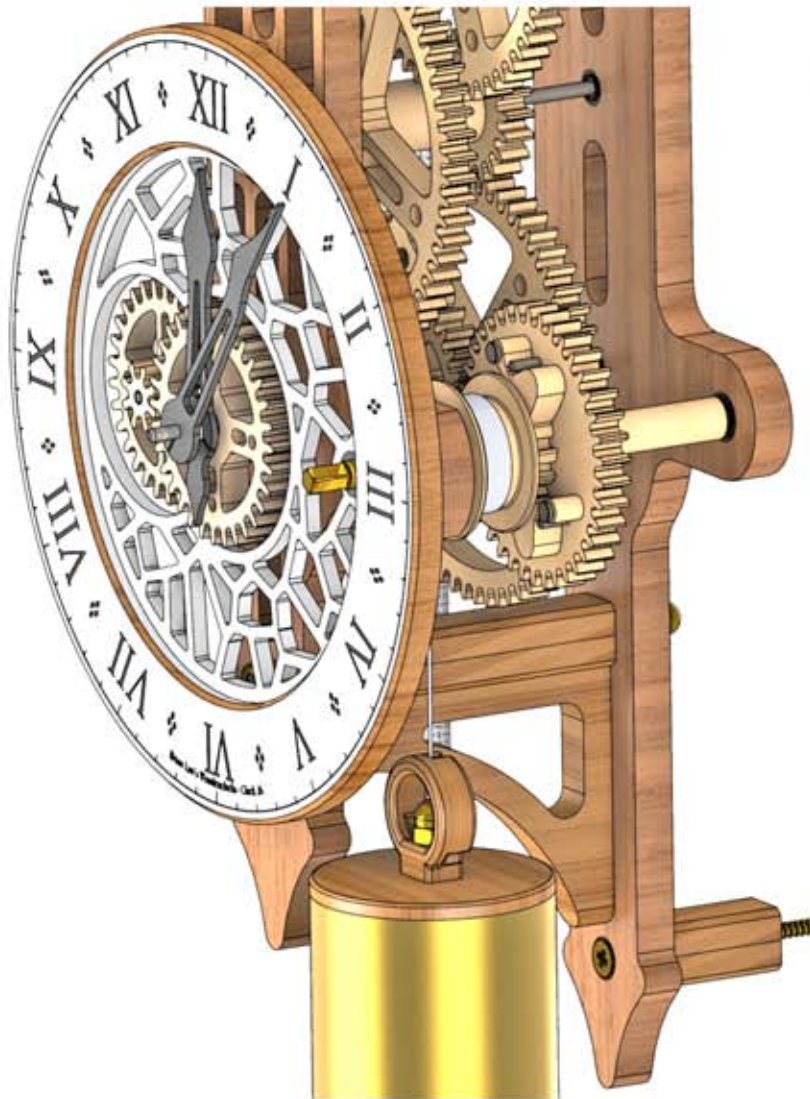
Stage 7 Assemble Front Frame and Dial



Fit the Front frame over the shaft ends and secure in position with the Domed nuts.
Fit the 10 toothed gear to the main shaft. Now mount the Hour gears and the dial.

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

Stage 8 Assemble the Weight and Wind the clock.



Before fitting the weight to the cord check that the little Pawl is engaged with its Ratchet.
If you don't do this the gear train will turn backwards and tangle the timing chain.

Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

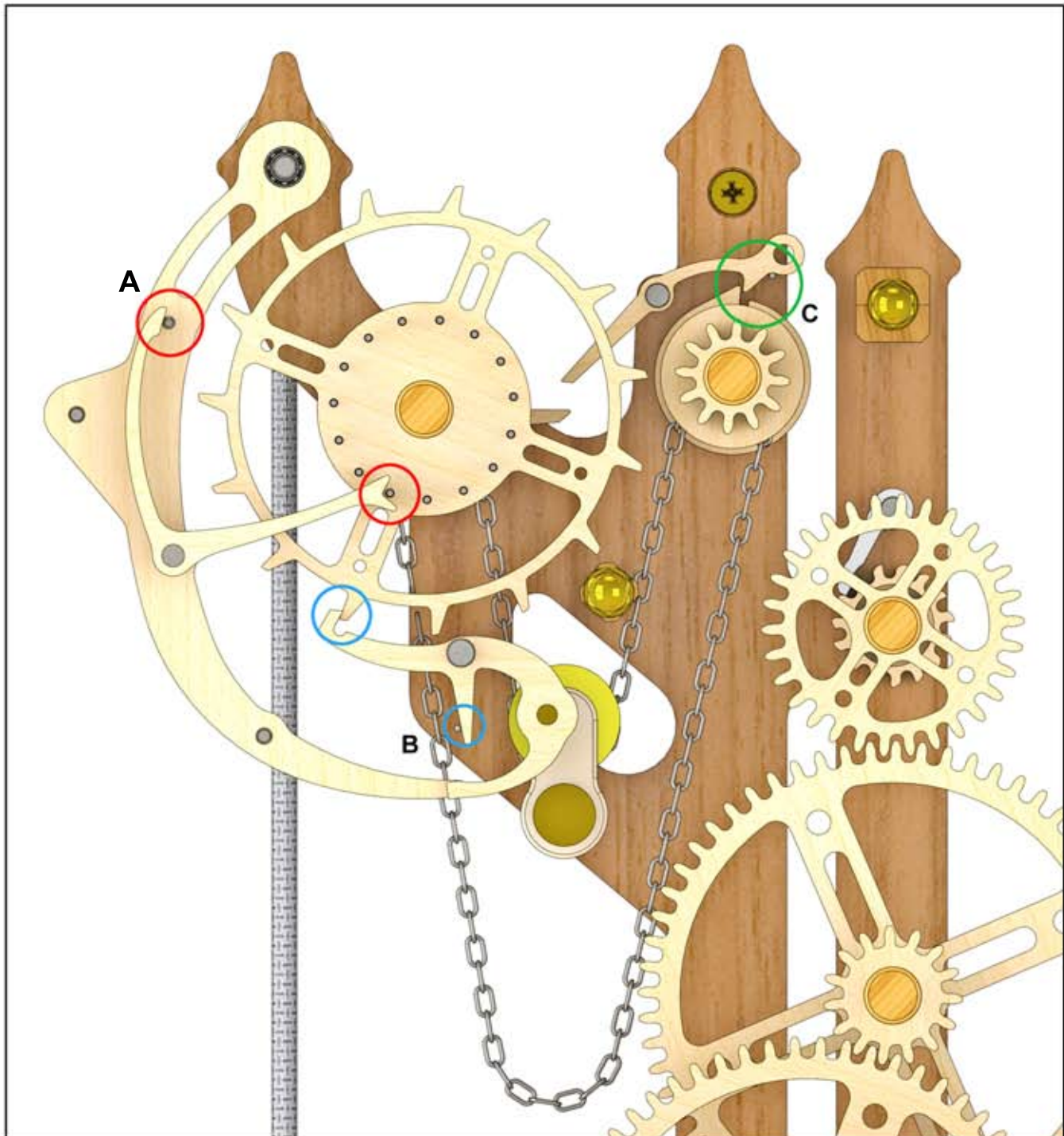
Stage 9 Adjust Gravity Arm

A - Adjust the Lifting lever contact with its stop pin so that the fork on the other end engages its pin on the Escape wheel as shown.

B - Adjust the Triggers Stop Pin by bending it so that the contact of the trigger with the escape wheel is as shown.

C - Adjust the Remontoire Pawls Stop Pin by bending it so that the contact of the Pawl with the Tooth is as shown.

These last two contacts should be the minimum possible to make sure that the minimum effort is needed to release the actions.



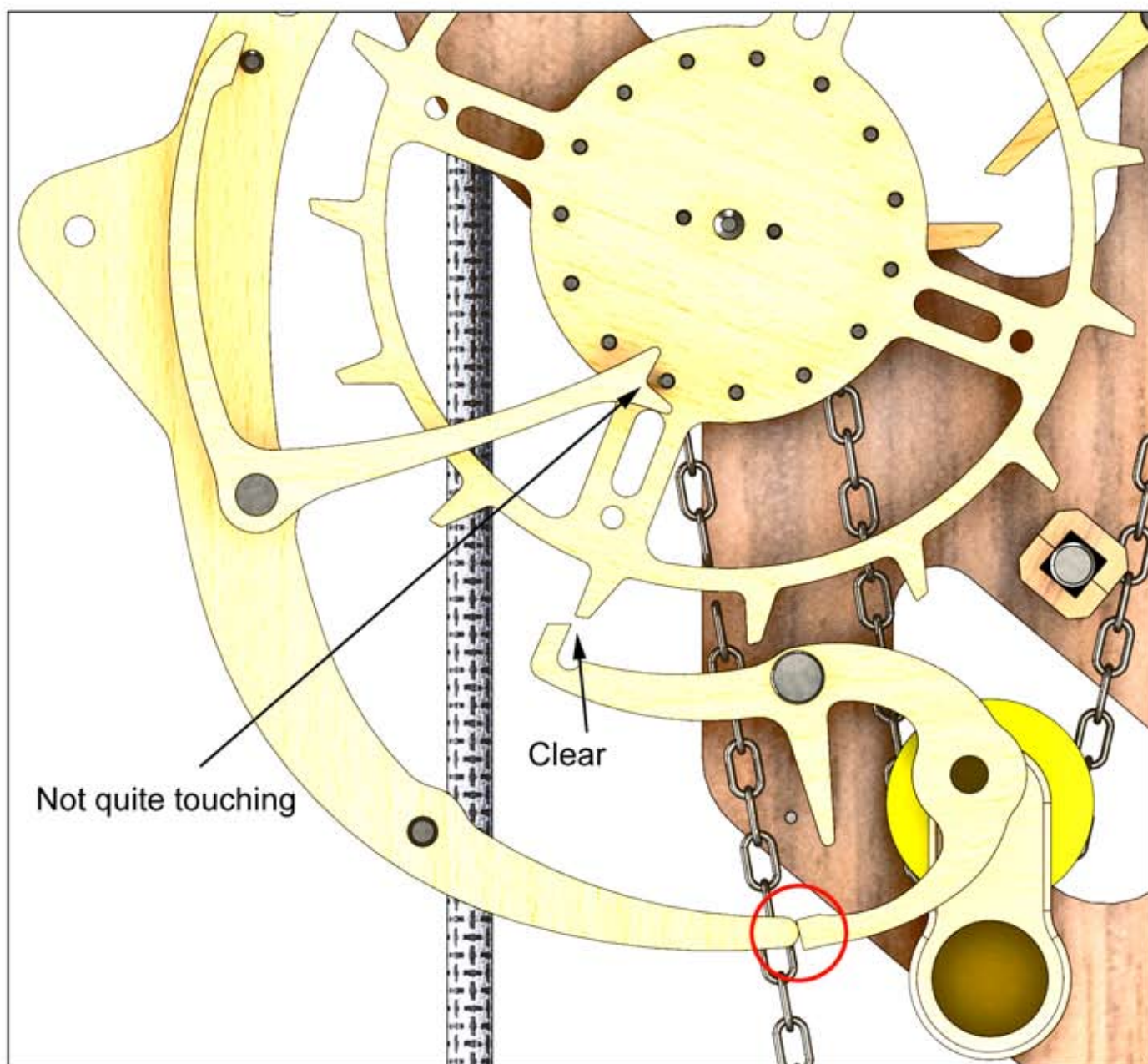
Brian Law's Wooden Clock 26 - with Remontoire

Assembly Sequence

Stage 10 Adjust Trigger action

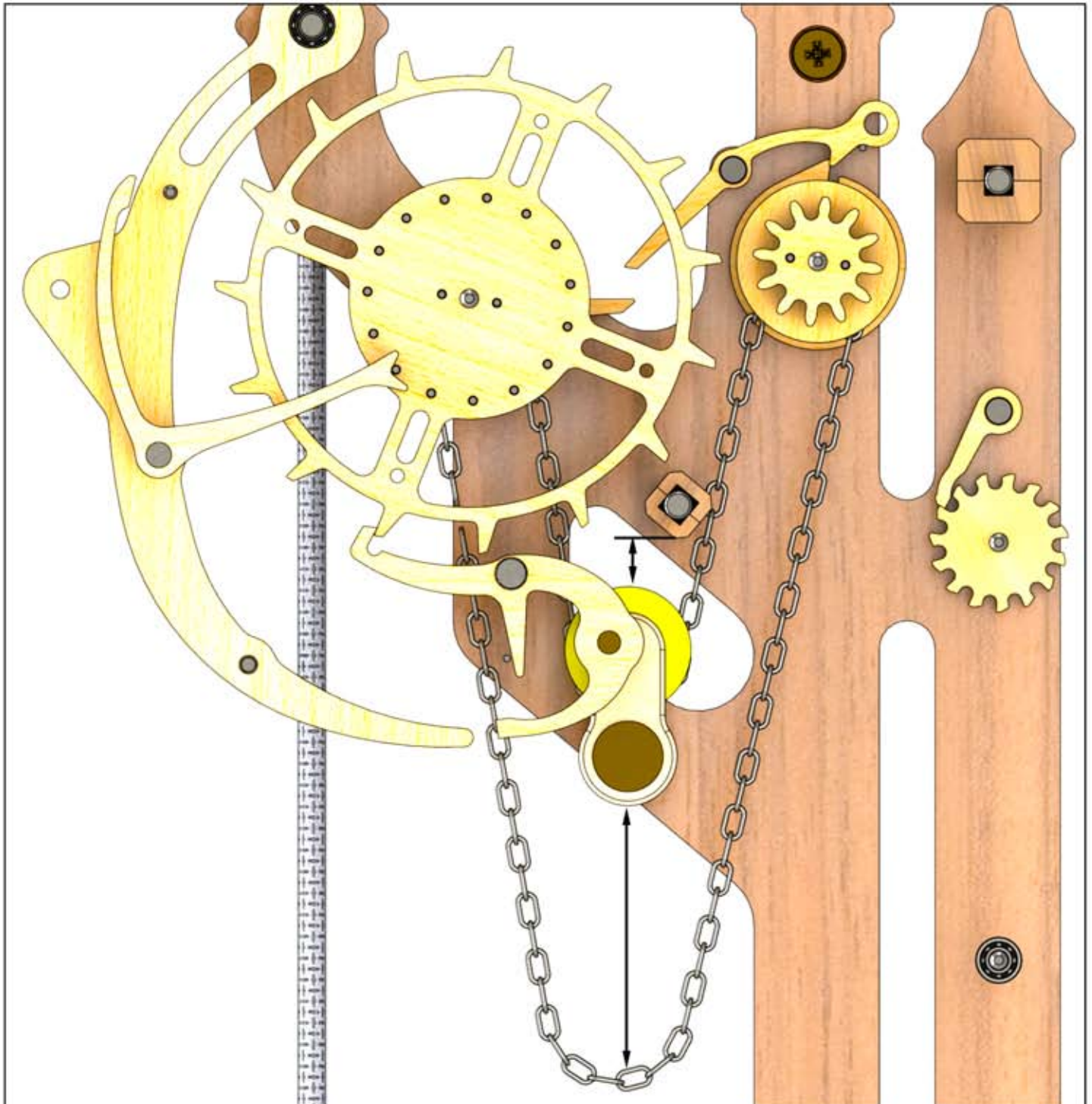
When the Lifting Lever forked end is approaching the Pin on the Escape wheel, the bottom end of the Gravity arm should have connected with the Trigger and pushed it just clear. It is important that the Escape wheel is free to move before the Lifting lever touches the pin otherwise the escapement will lock up. Adjust the contact between Gravity arm and trigger by filing off or adding to one or both components until the correct adjustment is reached.

See <http://brianlawswoodenclocks.blogspot.co.uk/2014/11/how-woodenclocks-gravity-escapement.html> for help understanding the Gravity escapement.



Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

Stage 10 Adjust Chain Position



To set the chain in its correct position make sure that when the Escapement weight is drawn back up to its highest position it is well clear of the underside of the smaller Frame spacer. Then when it reaches its lowest point after a further run of 30 seconds The Escapement weight should be just clear of the outer loop of the chain. The chain I used was from Meadows and Passmore LTD

Part number 0388 010014

Iron Chain 50.5 Links per foot. (LPF)

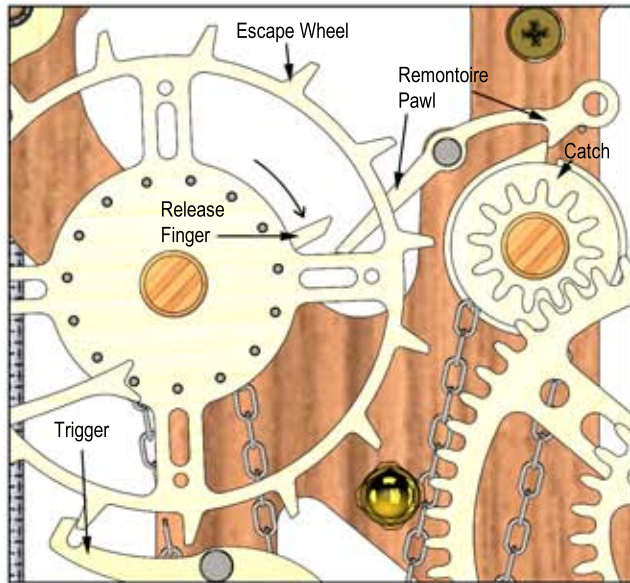
Length used in Prototype 660mm

Brian Law's Wooden Clock 26 - with Remontoire

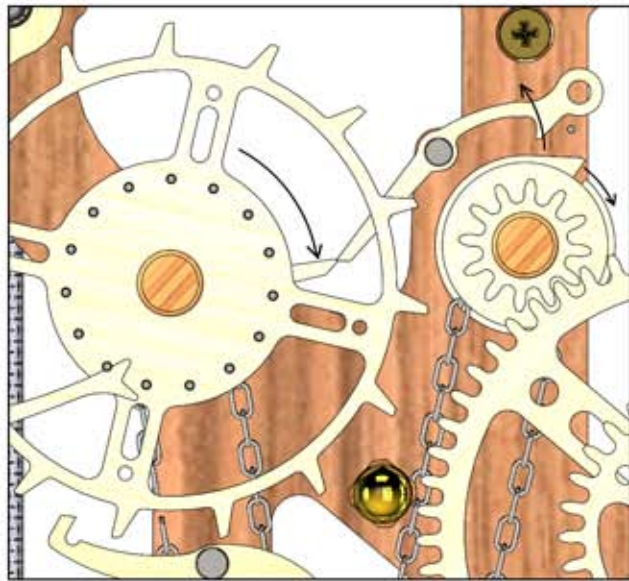
Assembly Sequence

Stage 11 Remontoire action

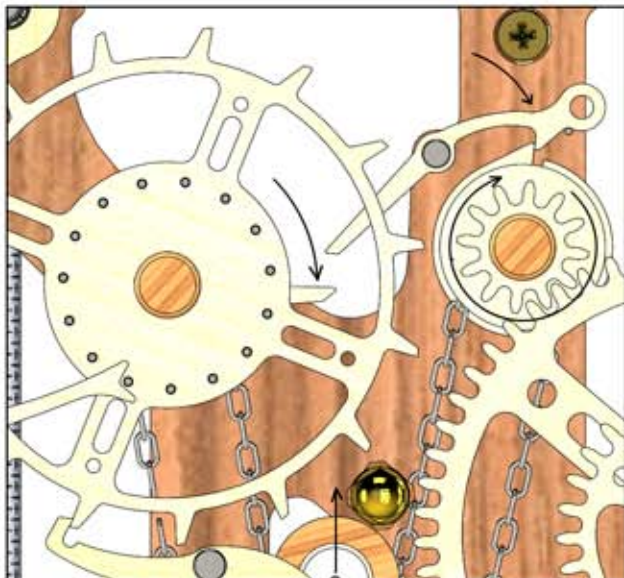
The



The Escape wheel rotates clockwise as it is driven by the Escapement weight. At the position shown here the Escapement weight is reaching its lowest position and needs to be drawn back up again. The Escape wheel will rotate on its next release by the Trigger and the Release Finger will touch and move the Remontoire Pawl.



The Trigger has now released the Escapement and the Release Finger has pushed down on the Remontoire Pawl, which in turn has released the Catch to allow the Drive train to pull up the chain which in turn will draw the Escapement weight to its topmost position.



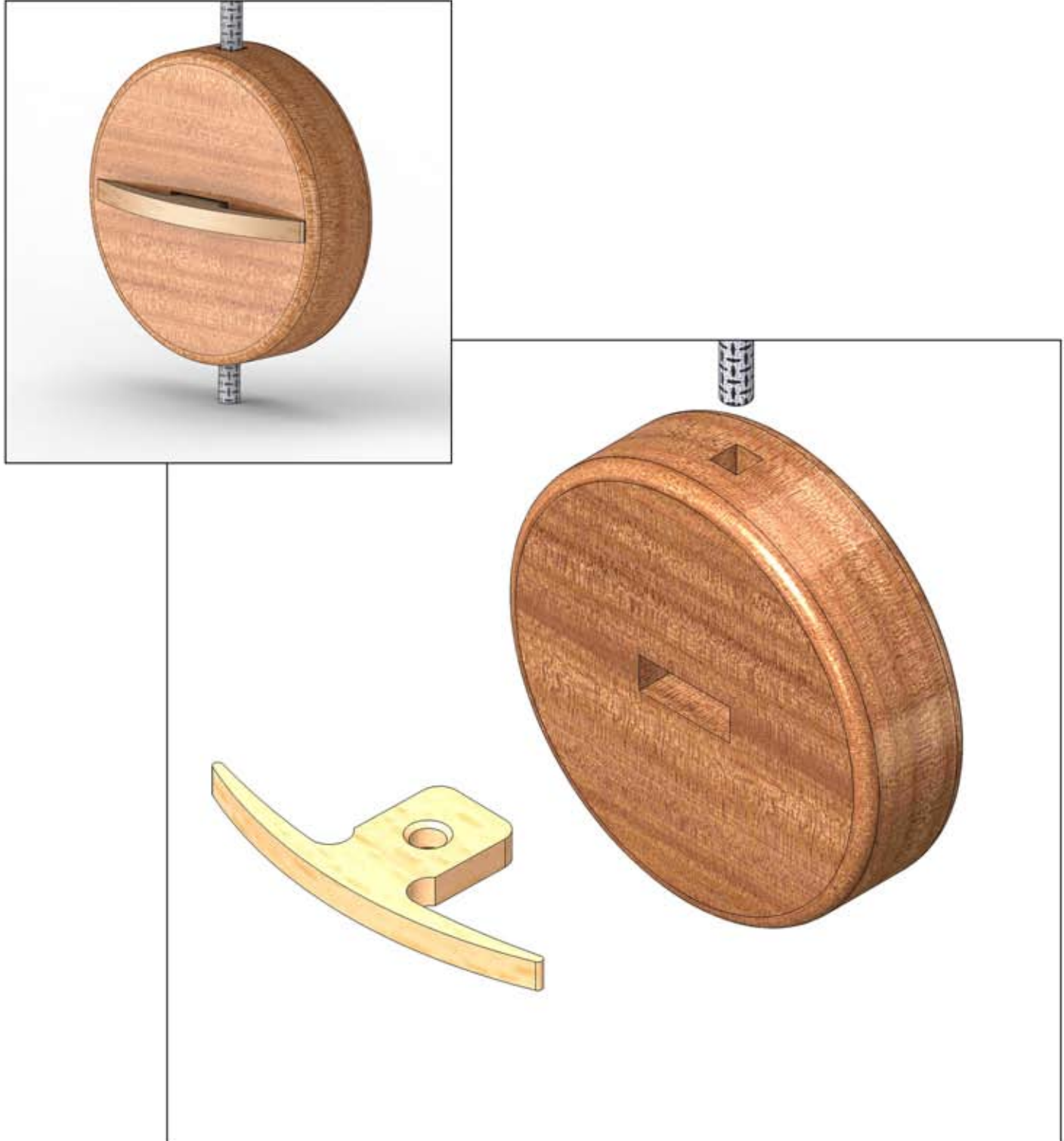
The release Finger has now moved past the Remontoire Pawl allowing it to drop back down in time to engage the Catch and stop the Drive train's motion. The Escapement weight has now been drawn up to its highest position.

Brian Law's Wooden Clock 26 - with Remontoire

Assembly Sequence

Stage 7 Assemble Pendulum Bob

Fit the Punulum lock into the centre of the pendulum Bob, and slide onto the Pendulum Rod. You have to press the pendulum lock so it can line up with the rod before it will slip on. Chamfering the hole in the Pendulum lock will help this. The position of the Pendulum Bob can be adjusted by pressing the pendulum lock and sliding the Bob up, to speed up the clock and sliding down to slow it down.



Brian Law's Wooden Clock 26 - with Remontoire Assembly Sequence

Typical fits required at all shafts.

