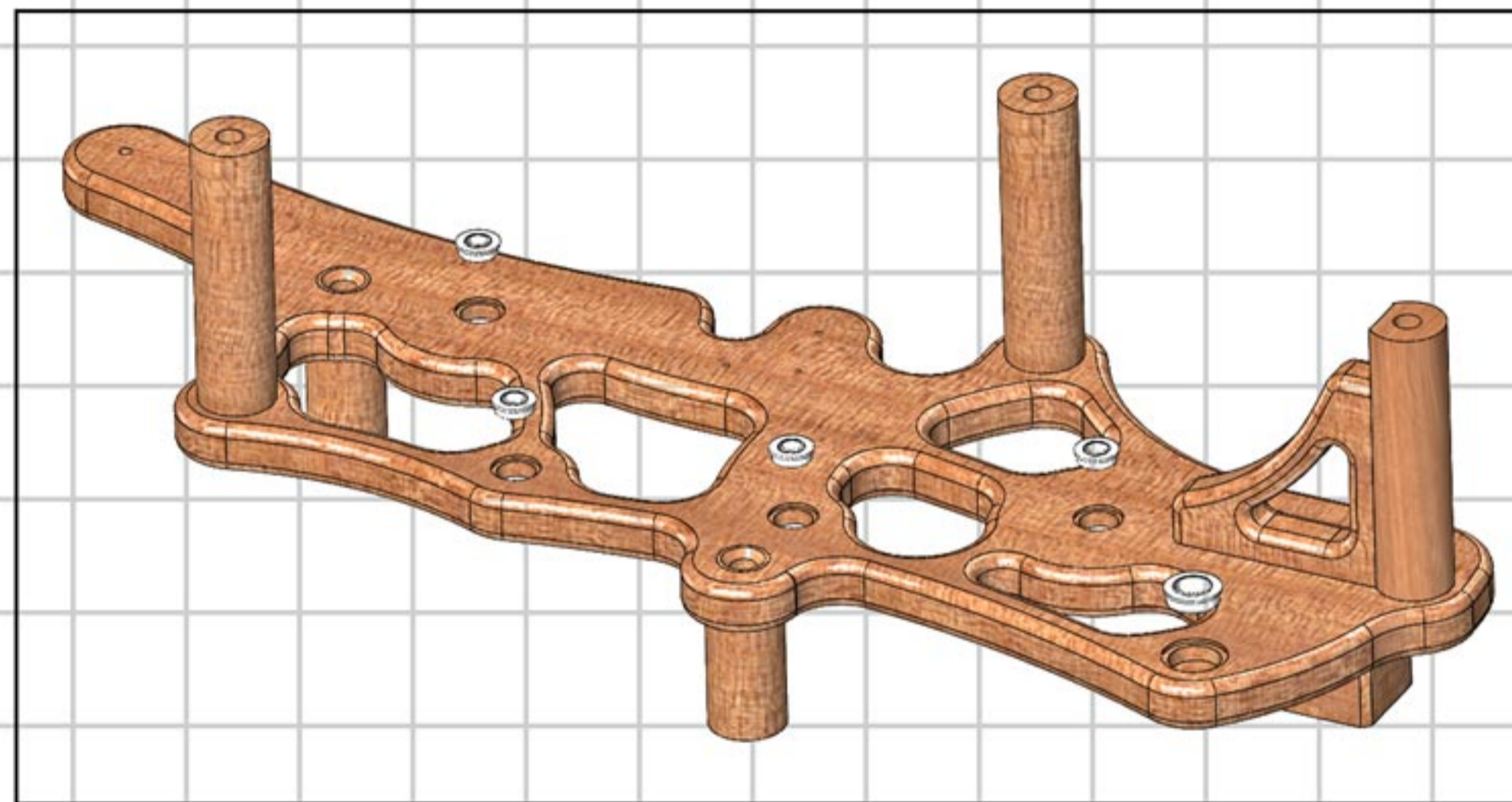
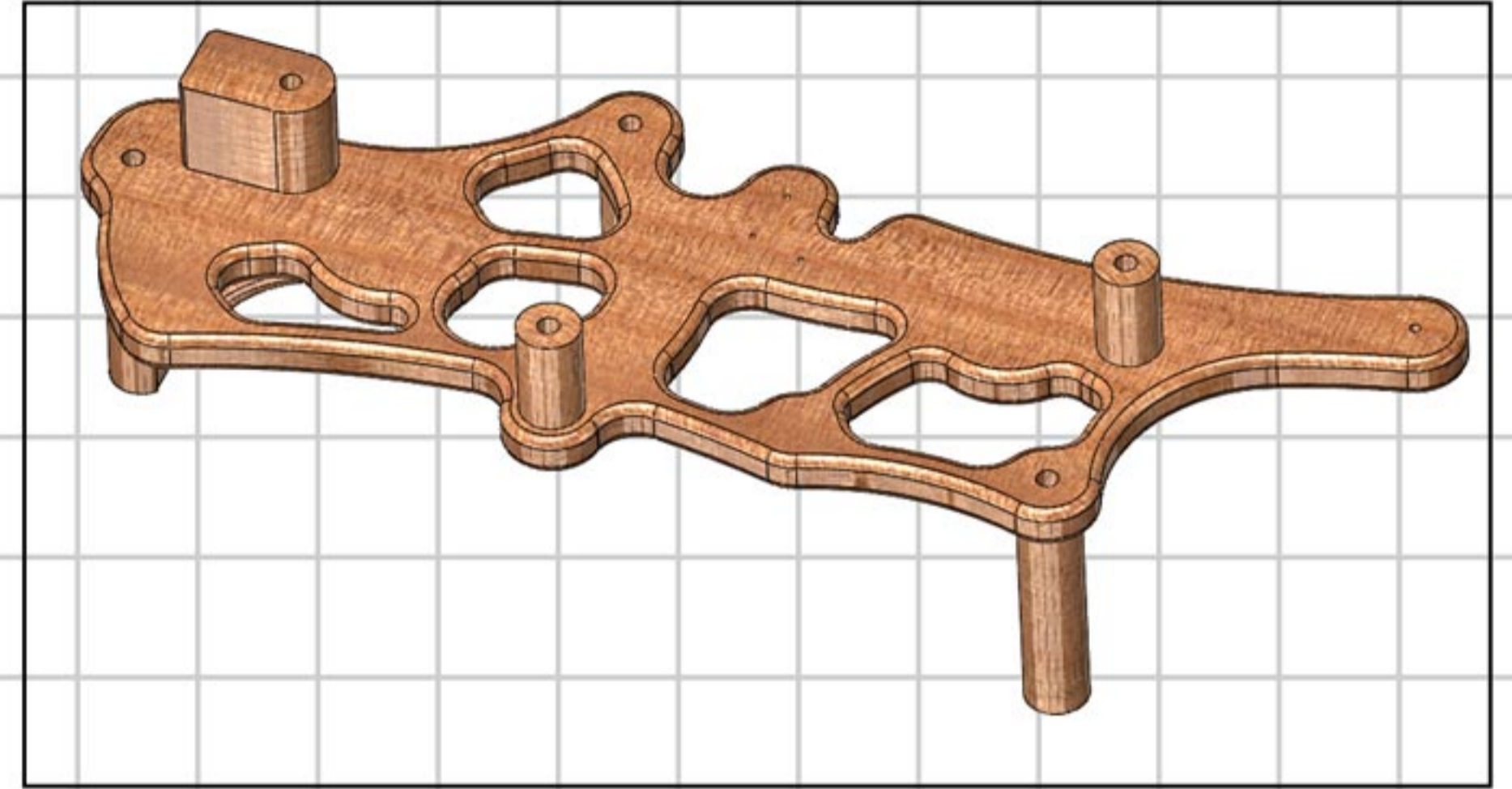
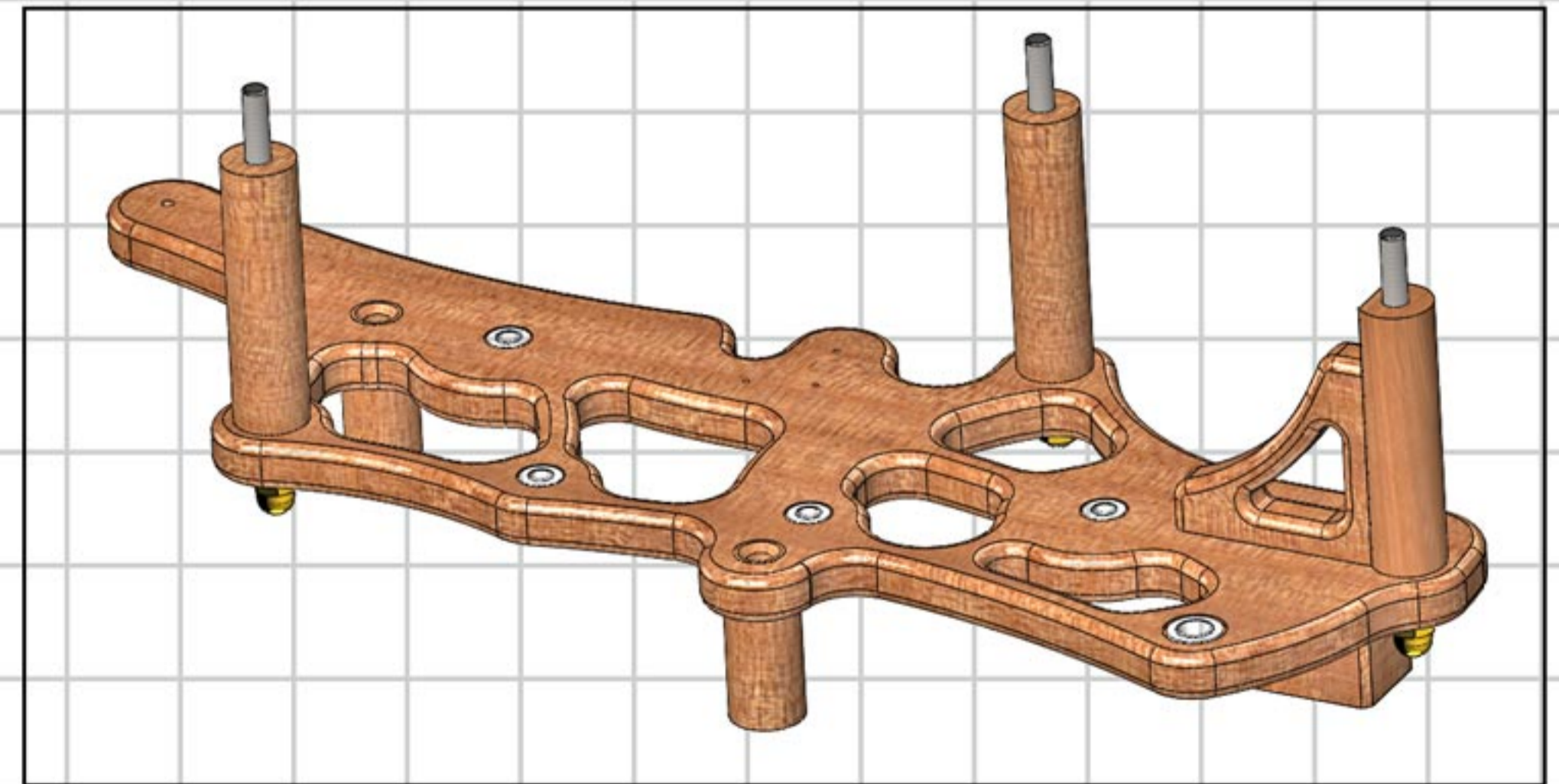


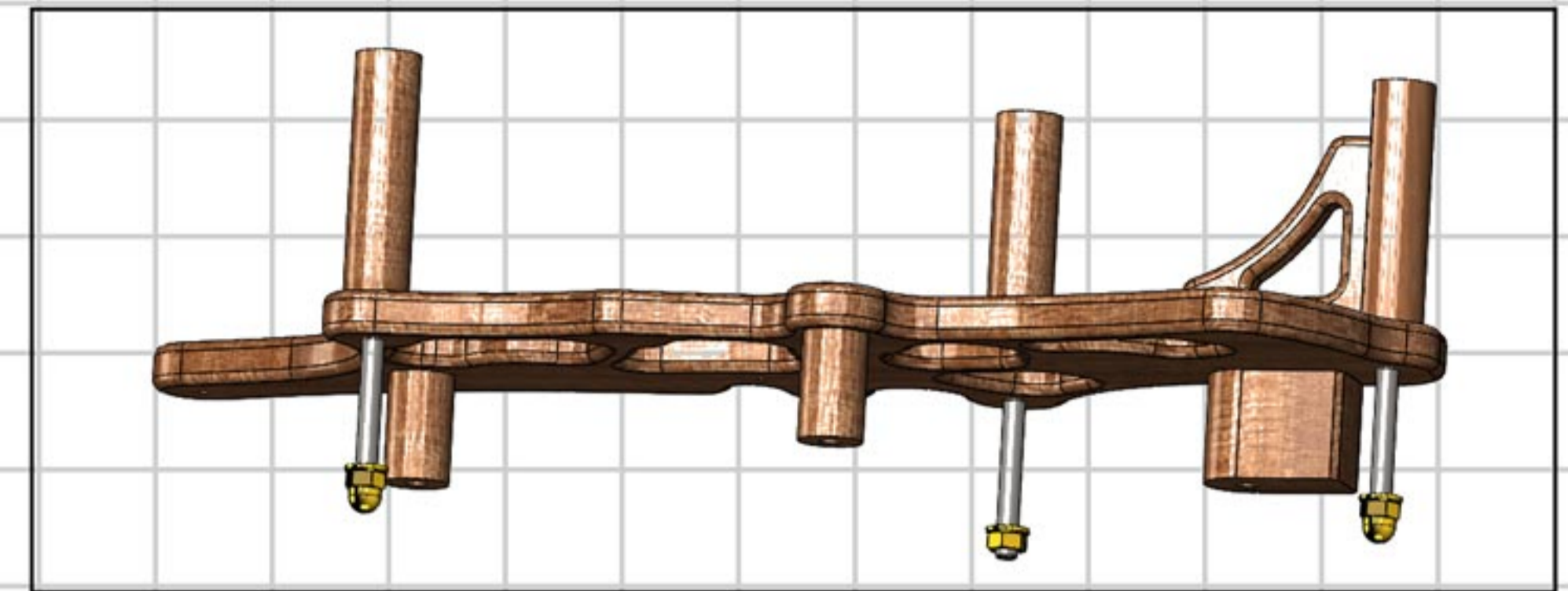
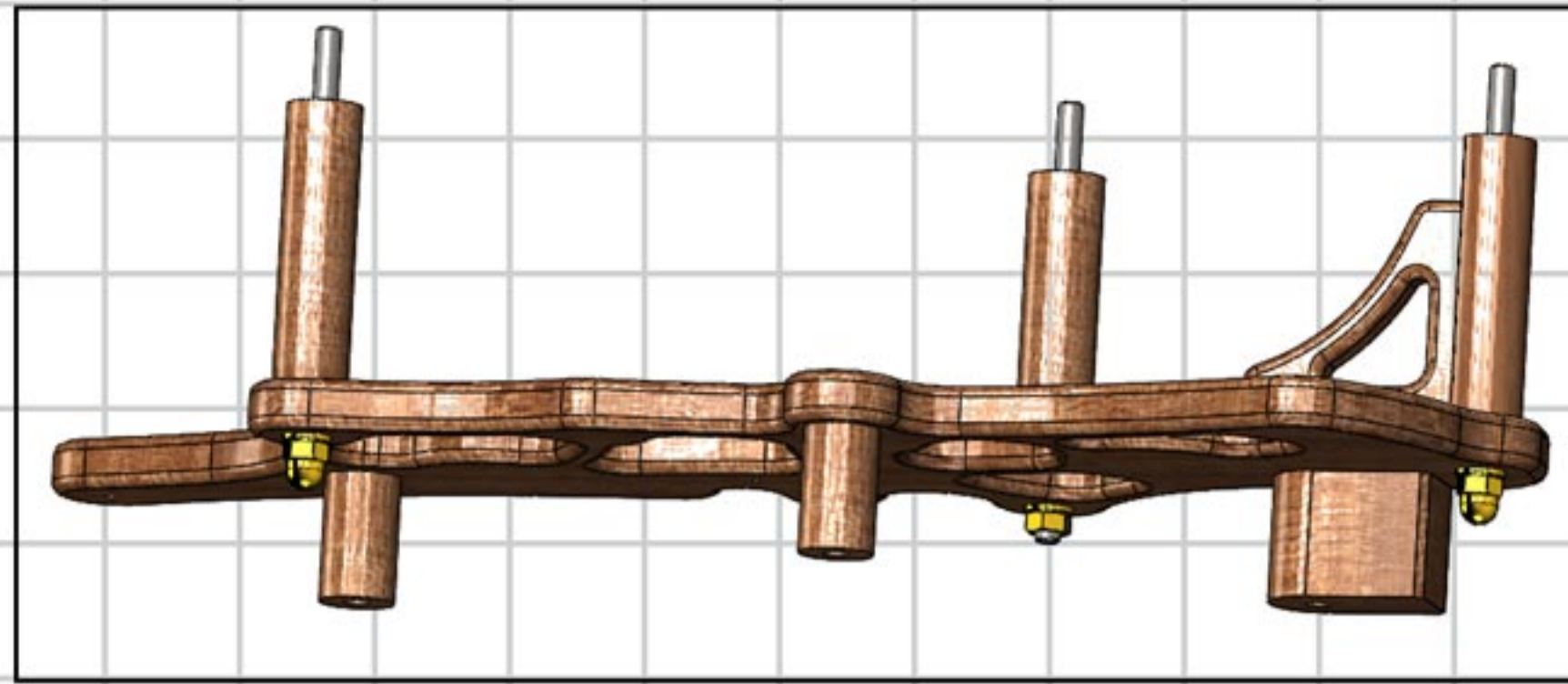
The first step is to glue together all the Back Frame parts



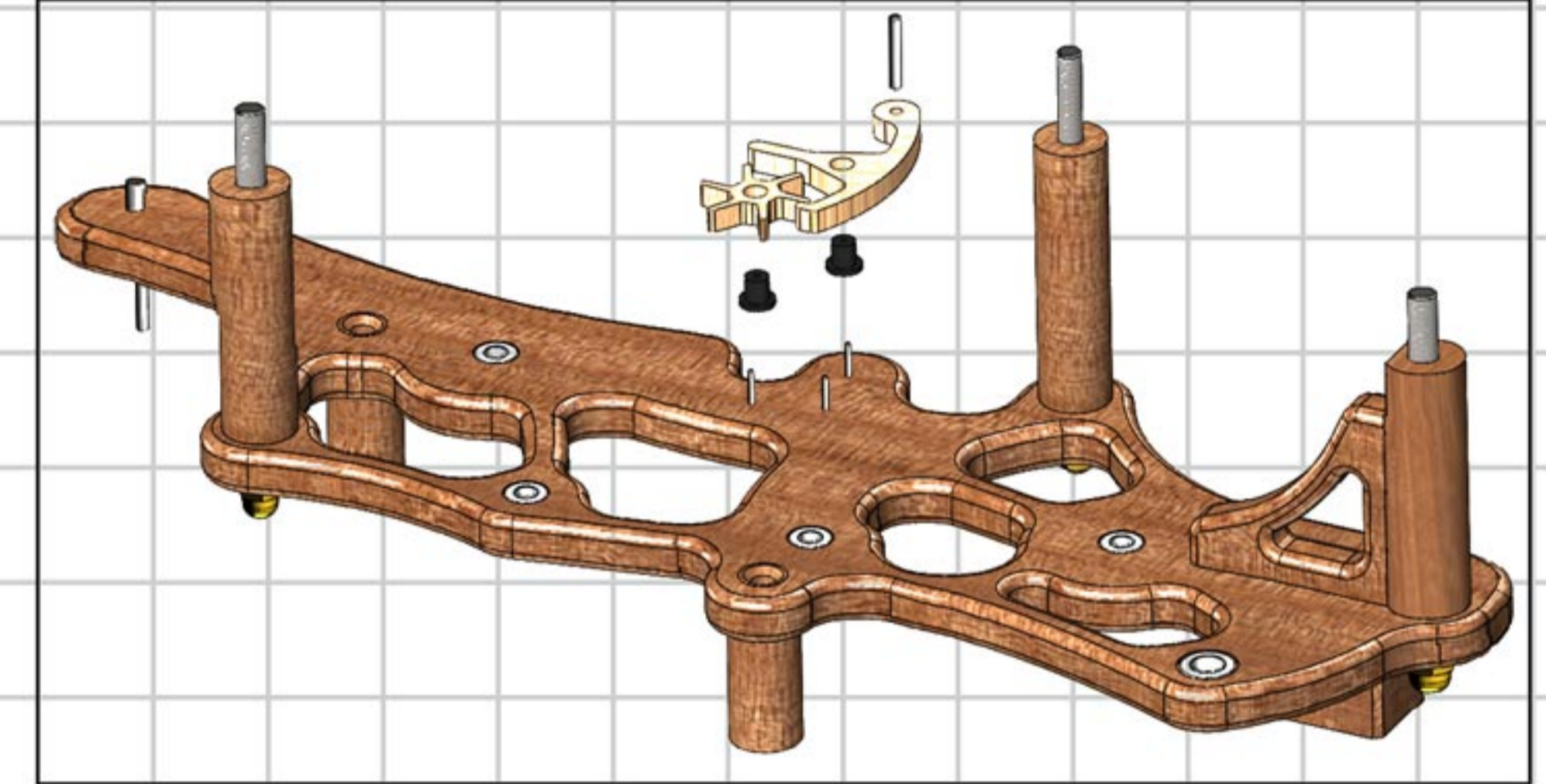
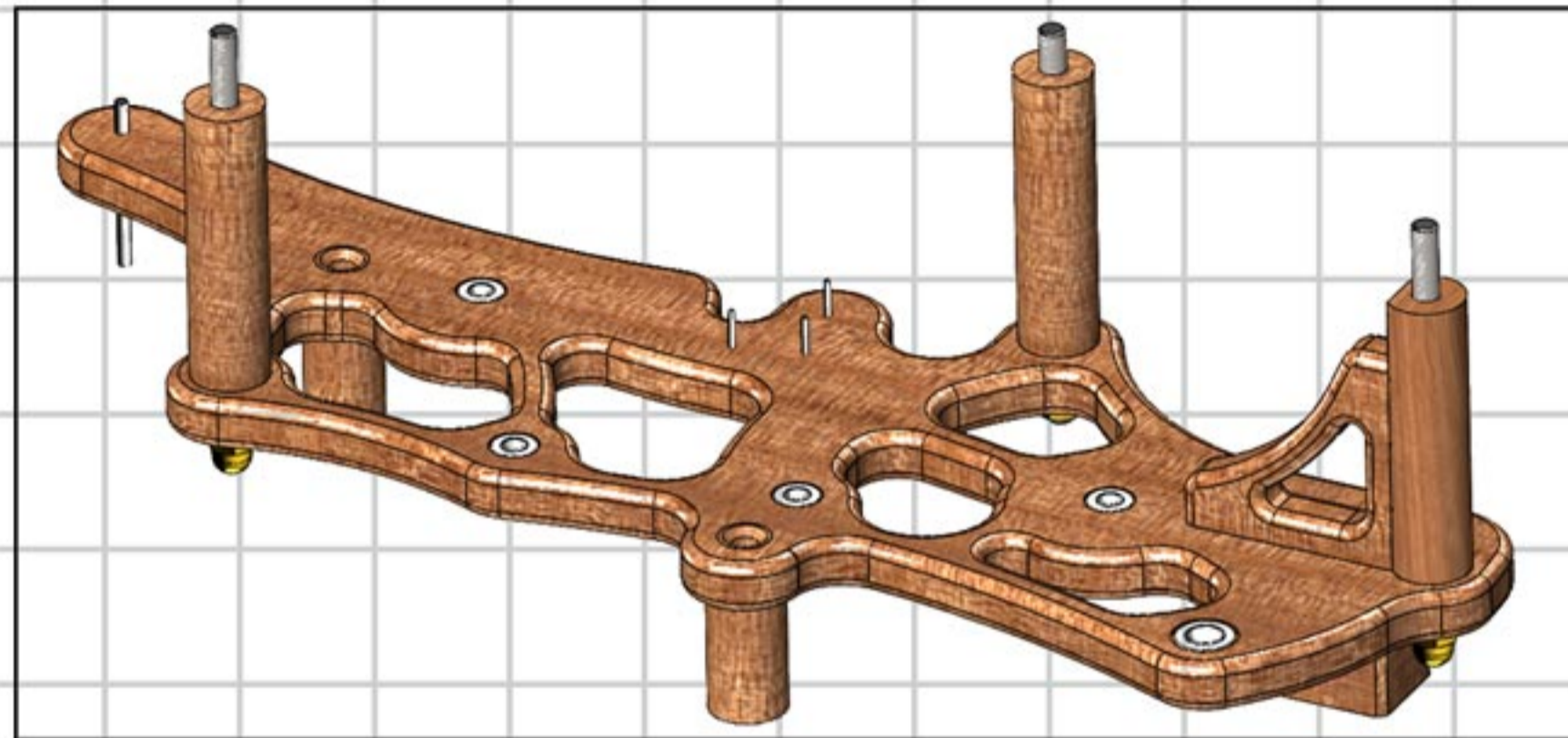
Fit the bearings to the Front and Back Frames



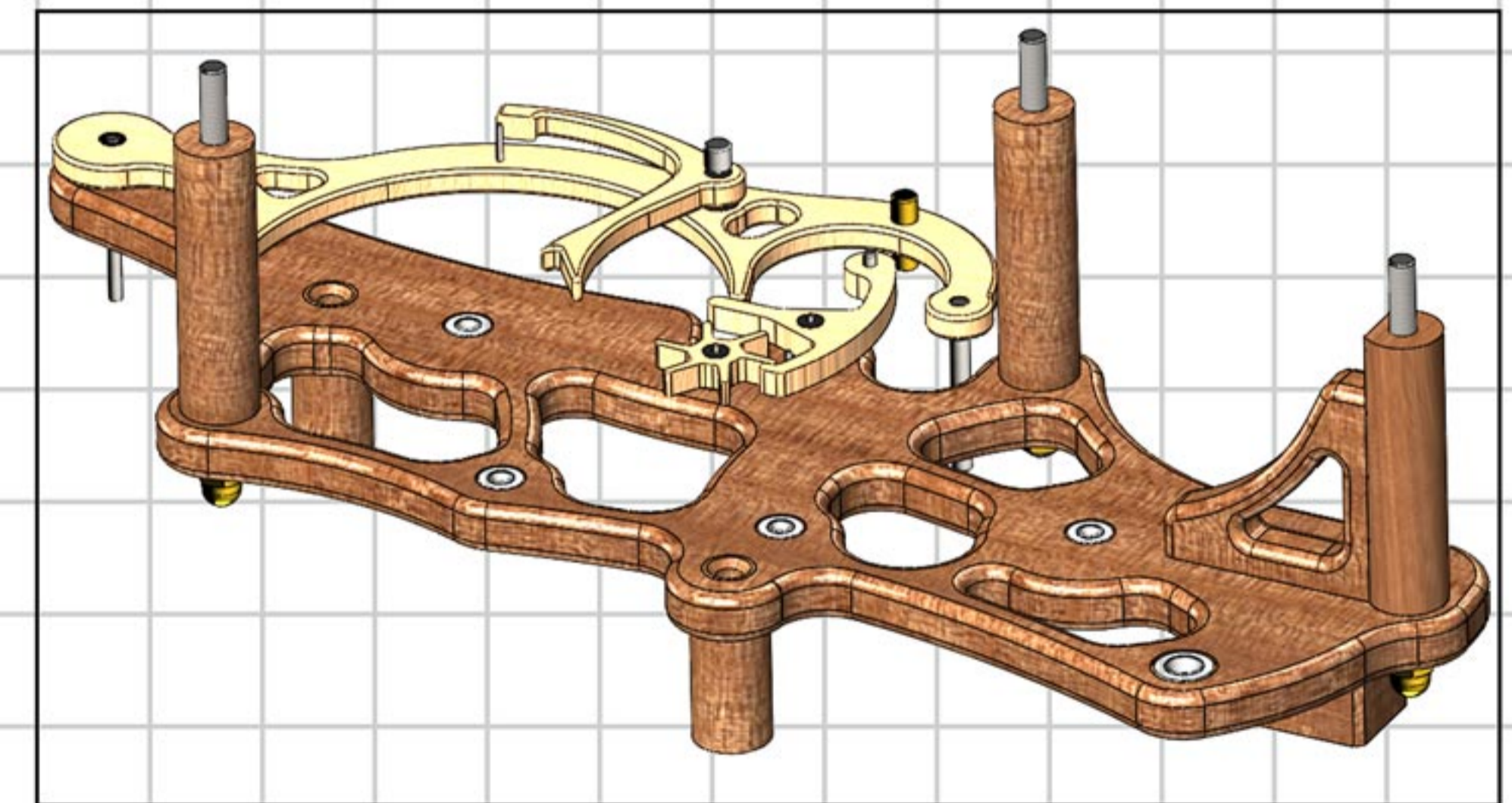
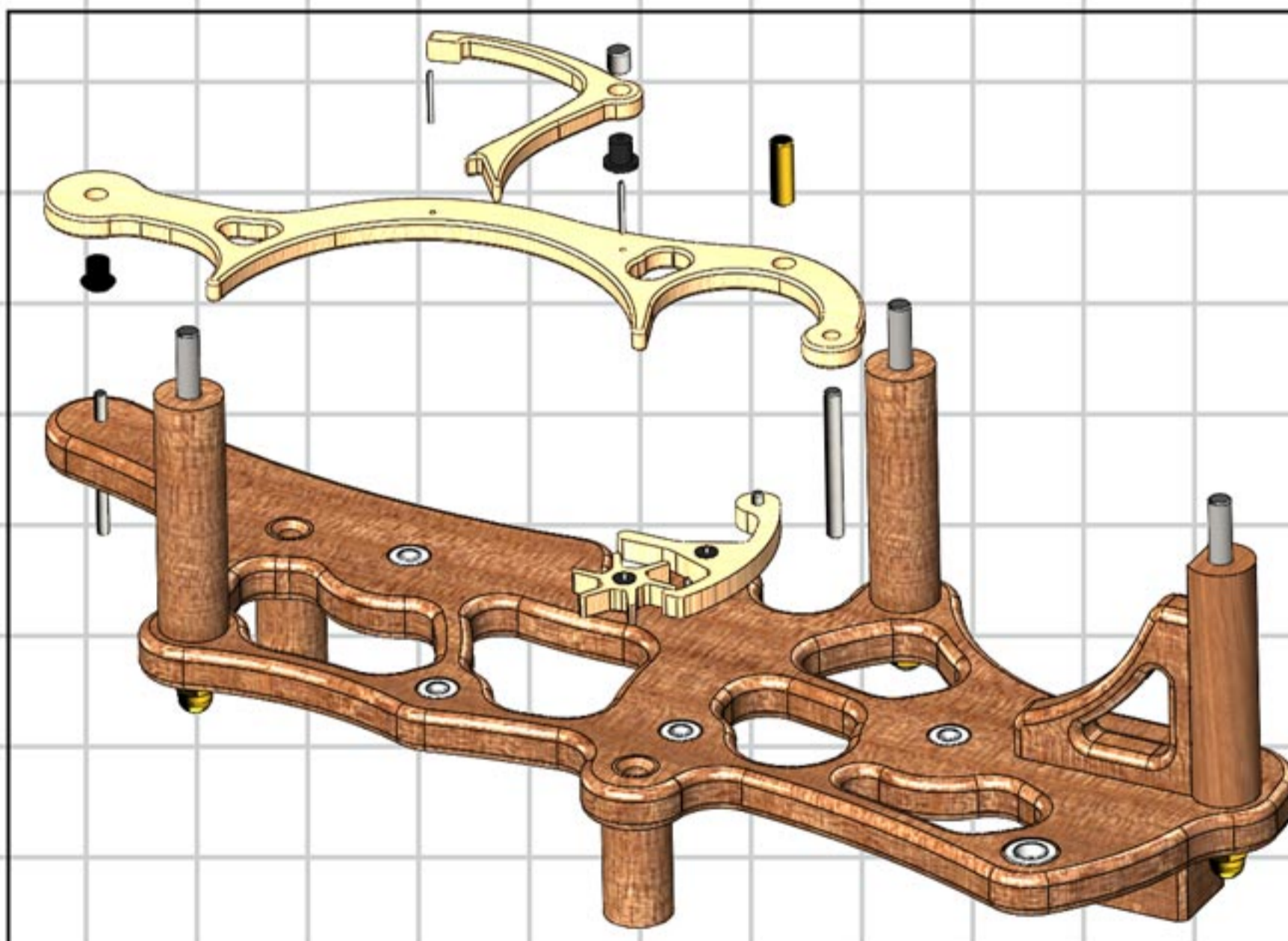
The next step is to feed the Threaded rods onto the Bottom Frame along with the nuts and washers. These will hang loose for now.



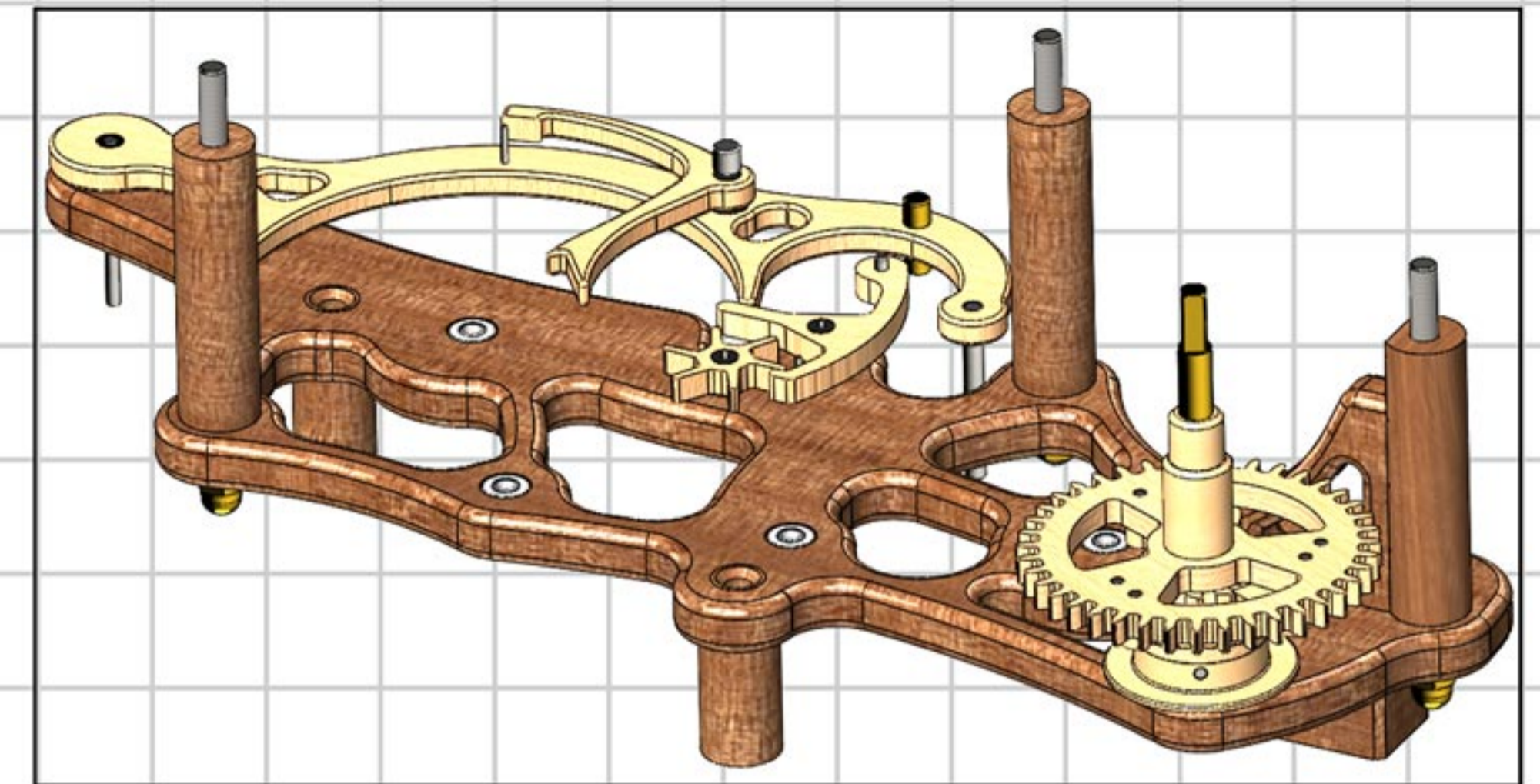
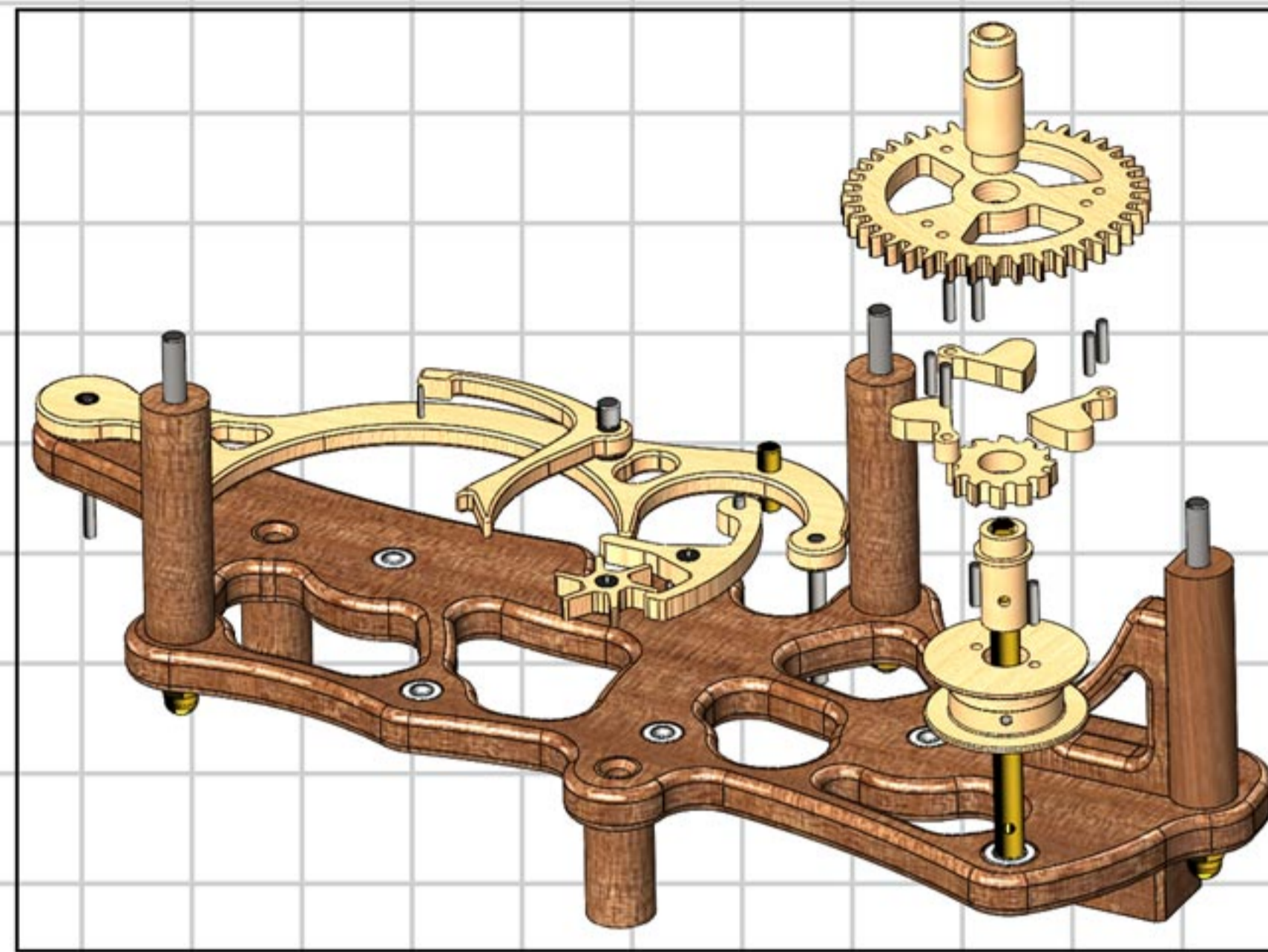
Next fit the Pivot pins into the Back Frame and then fit the Trigger and Catch.



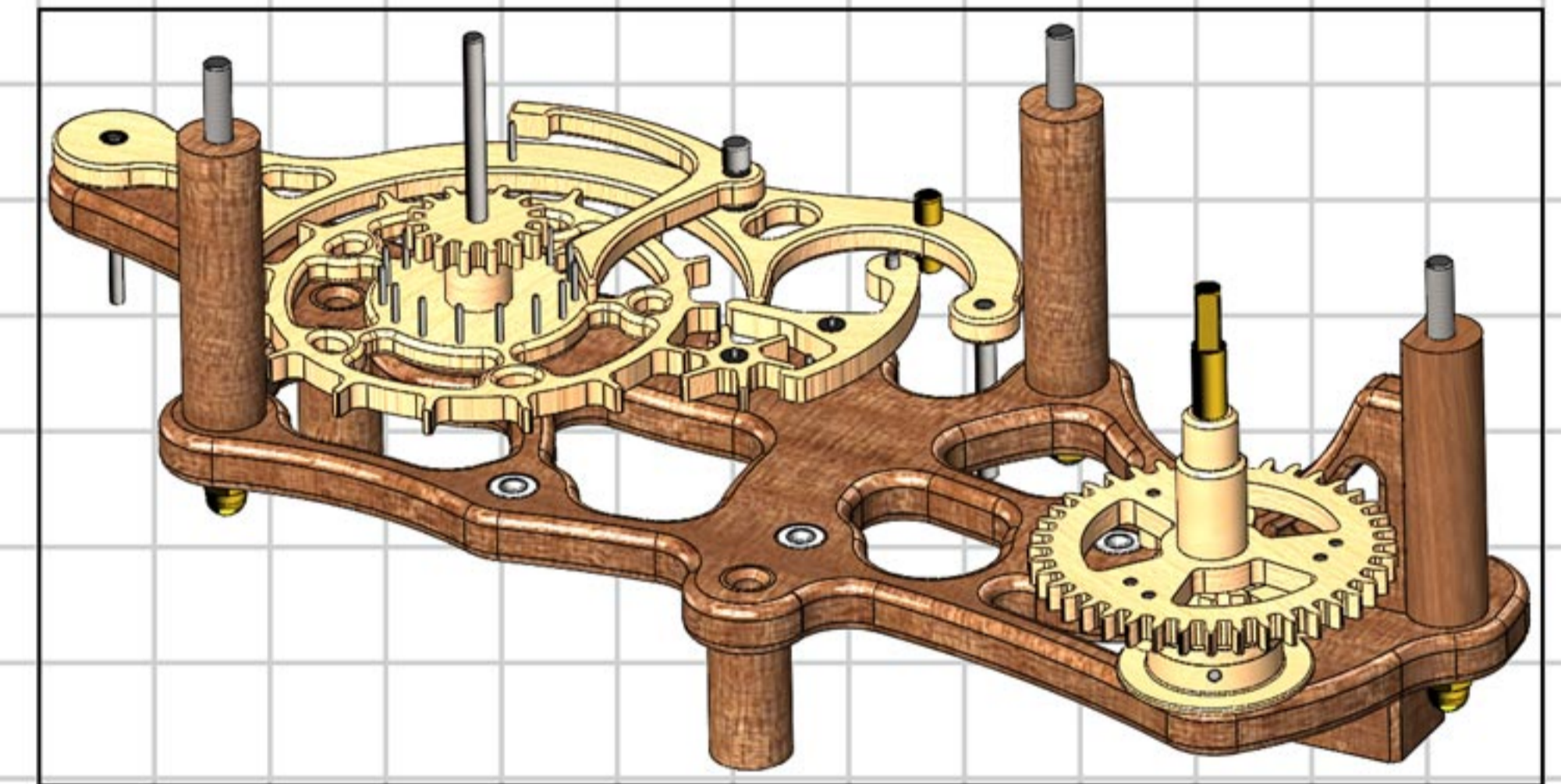
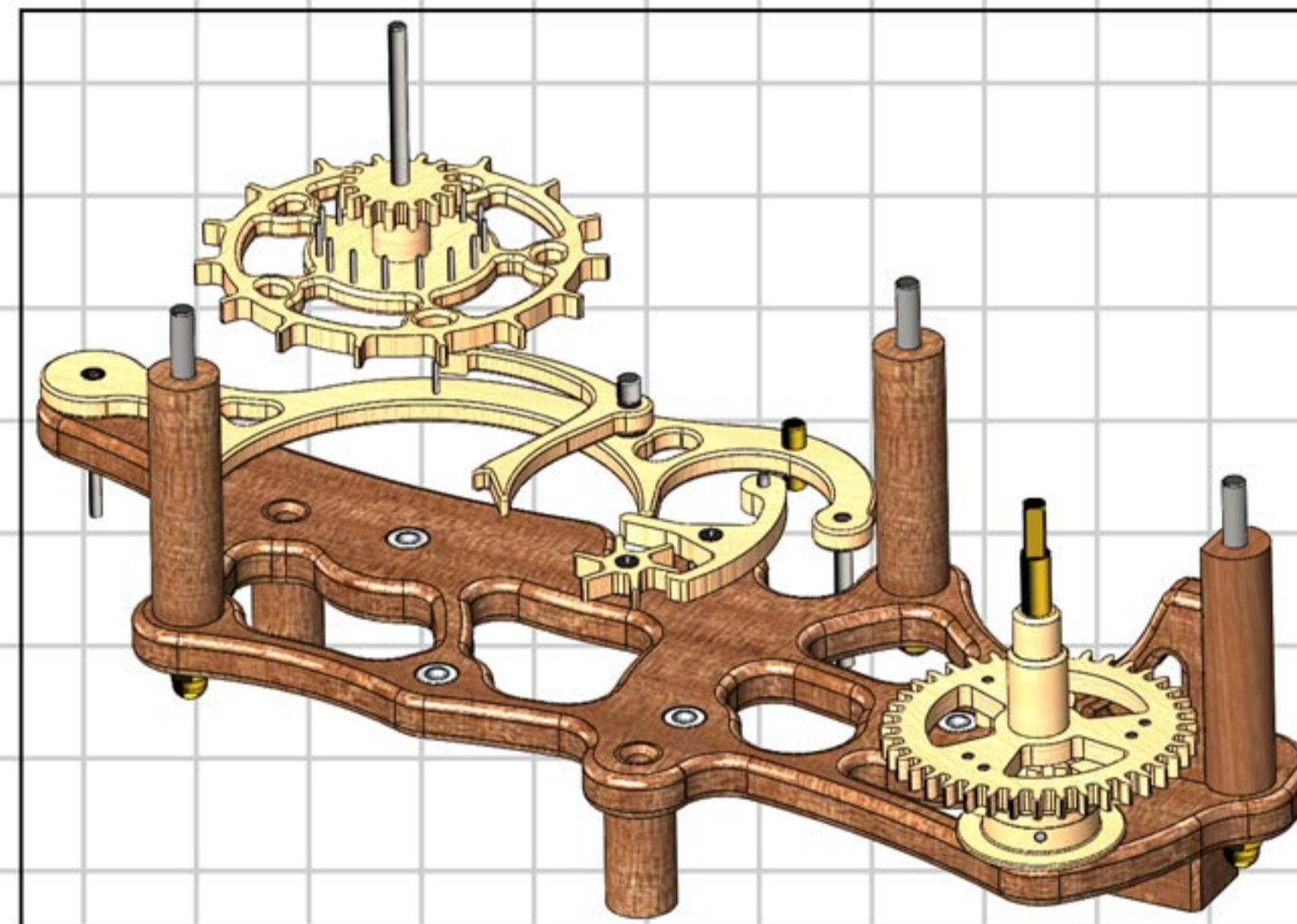
Now assemble the Gravity arm, first fitting the Lifting lever with its sleeves and pins and then slide onto the Pendulum pivot pin at the top.

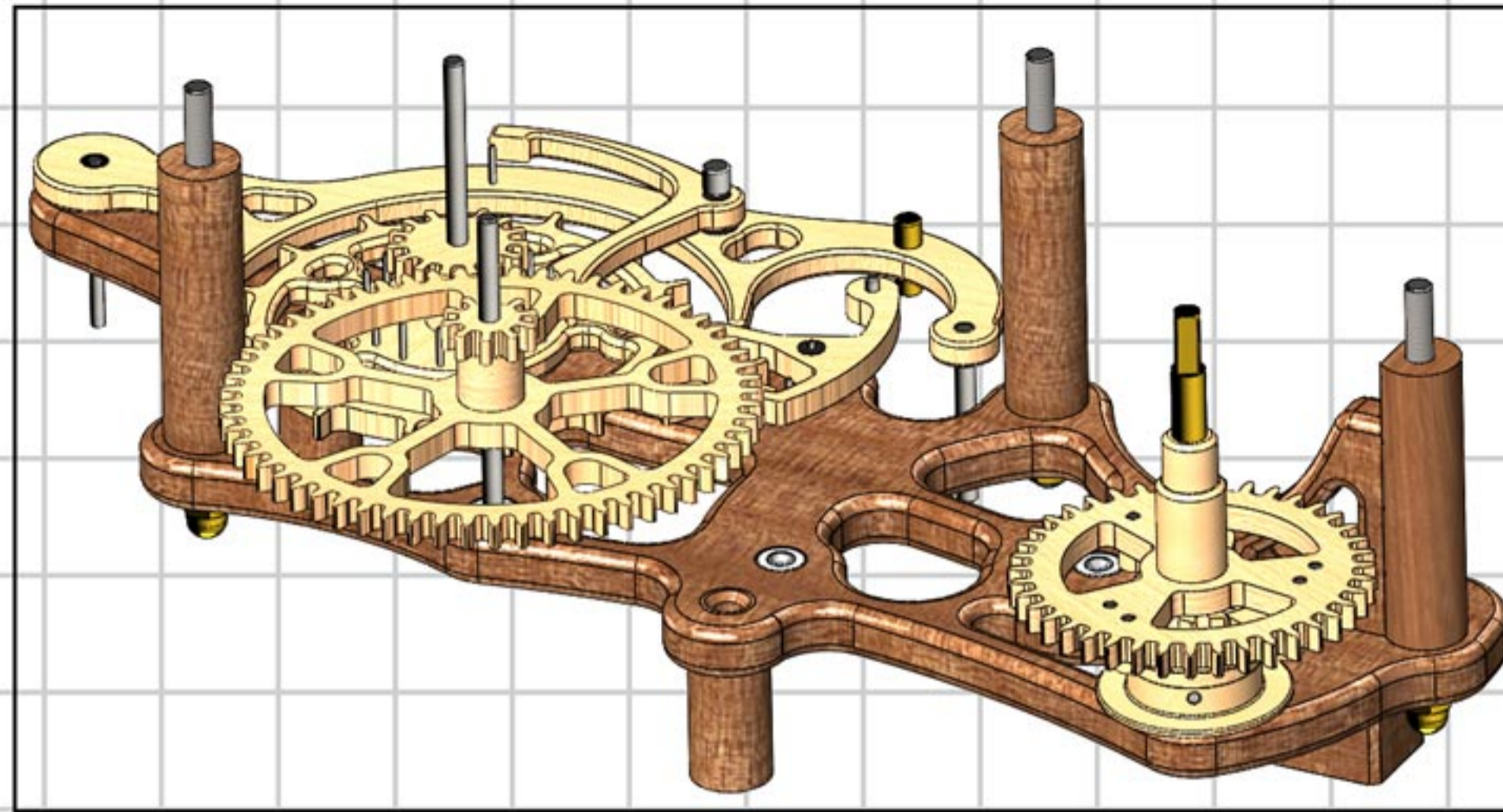


Mount the parts of the Drive assembly to its shaft and then fit to the Back.

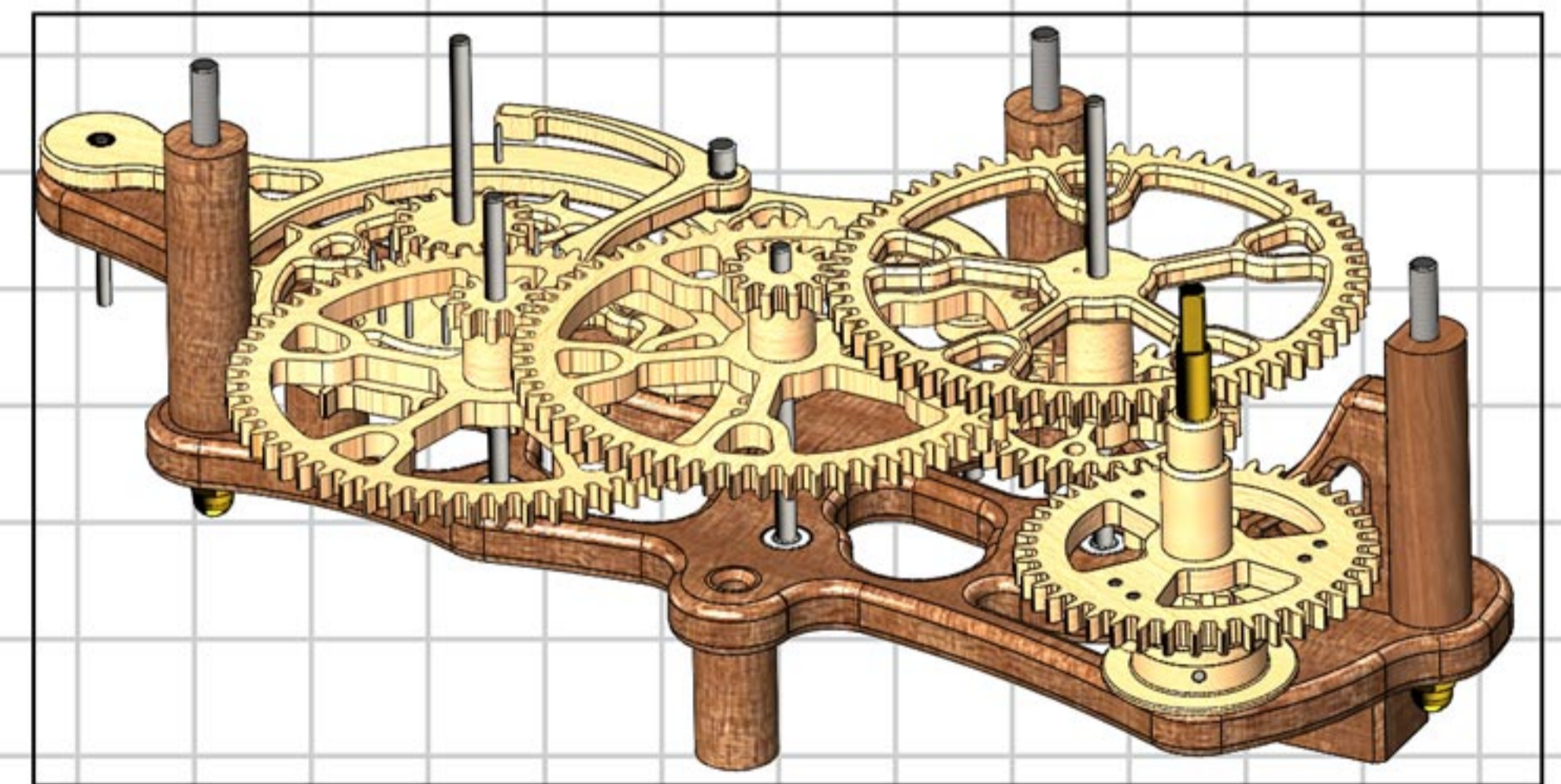
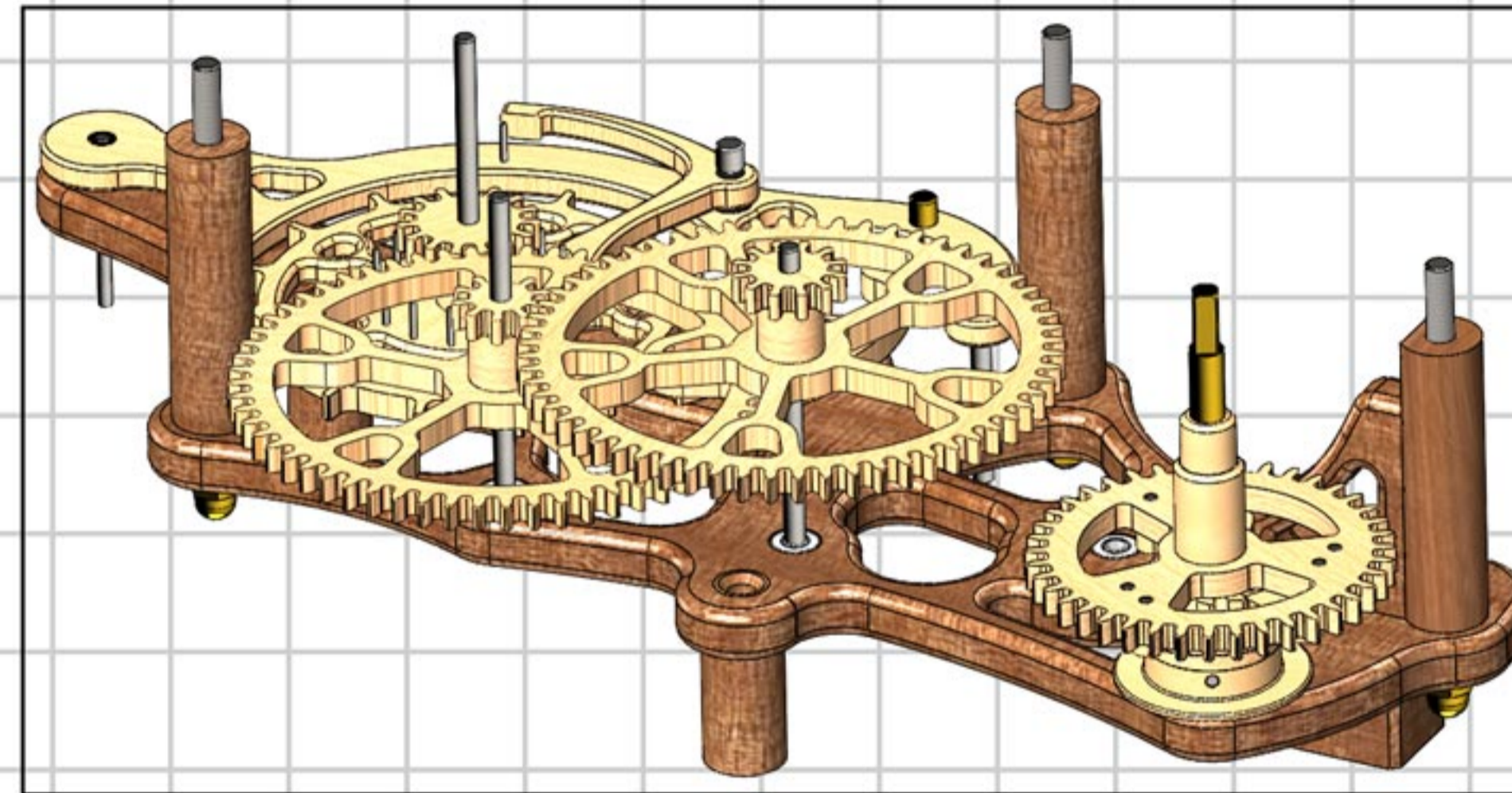


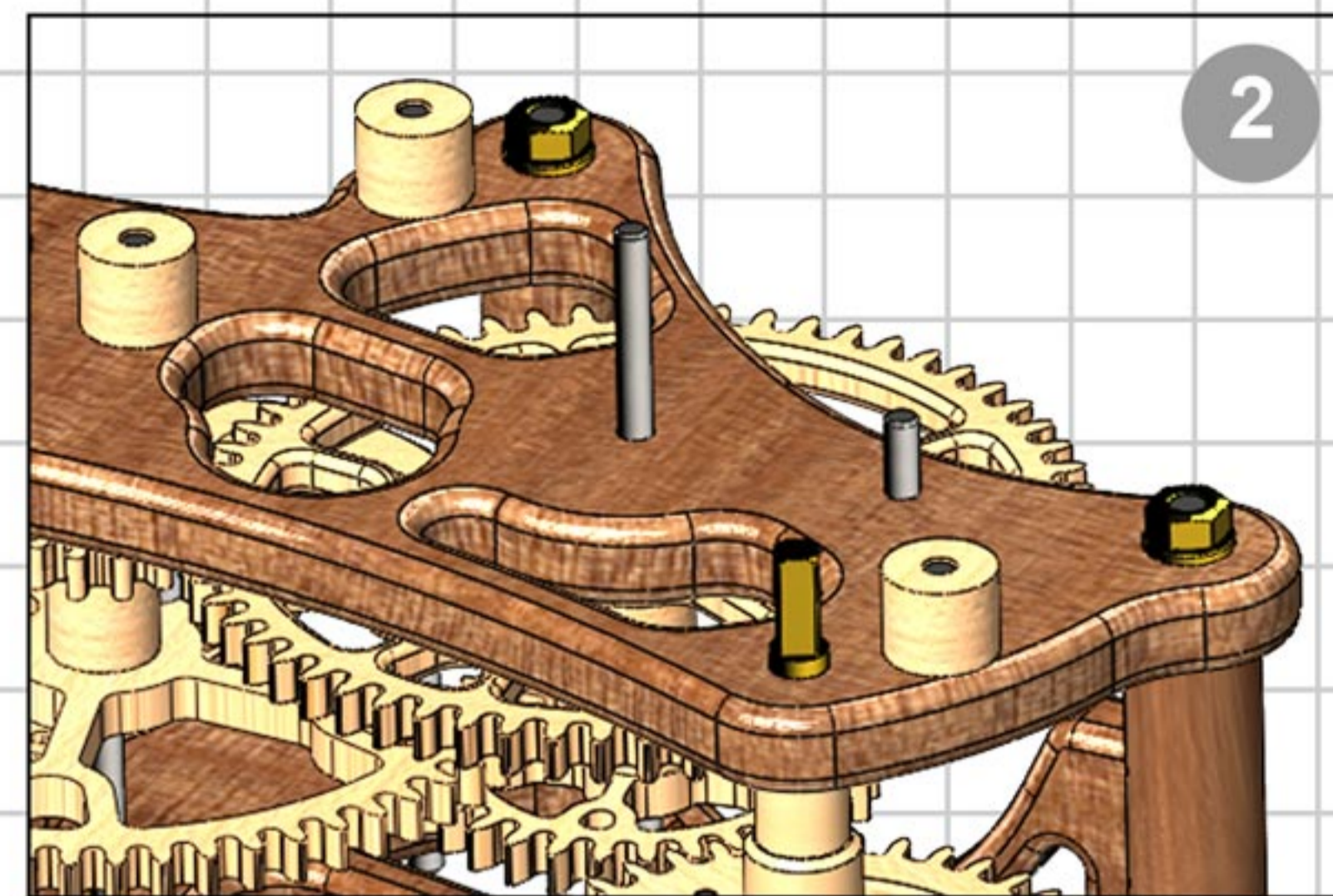
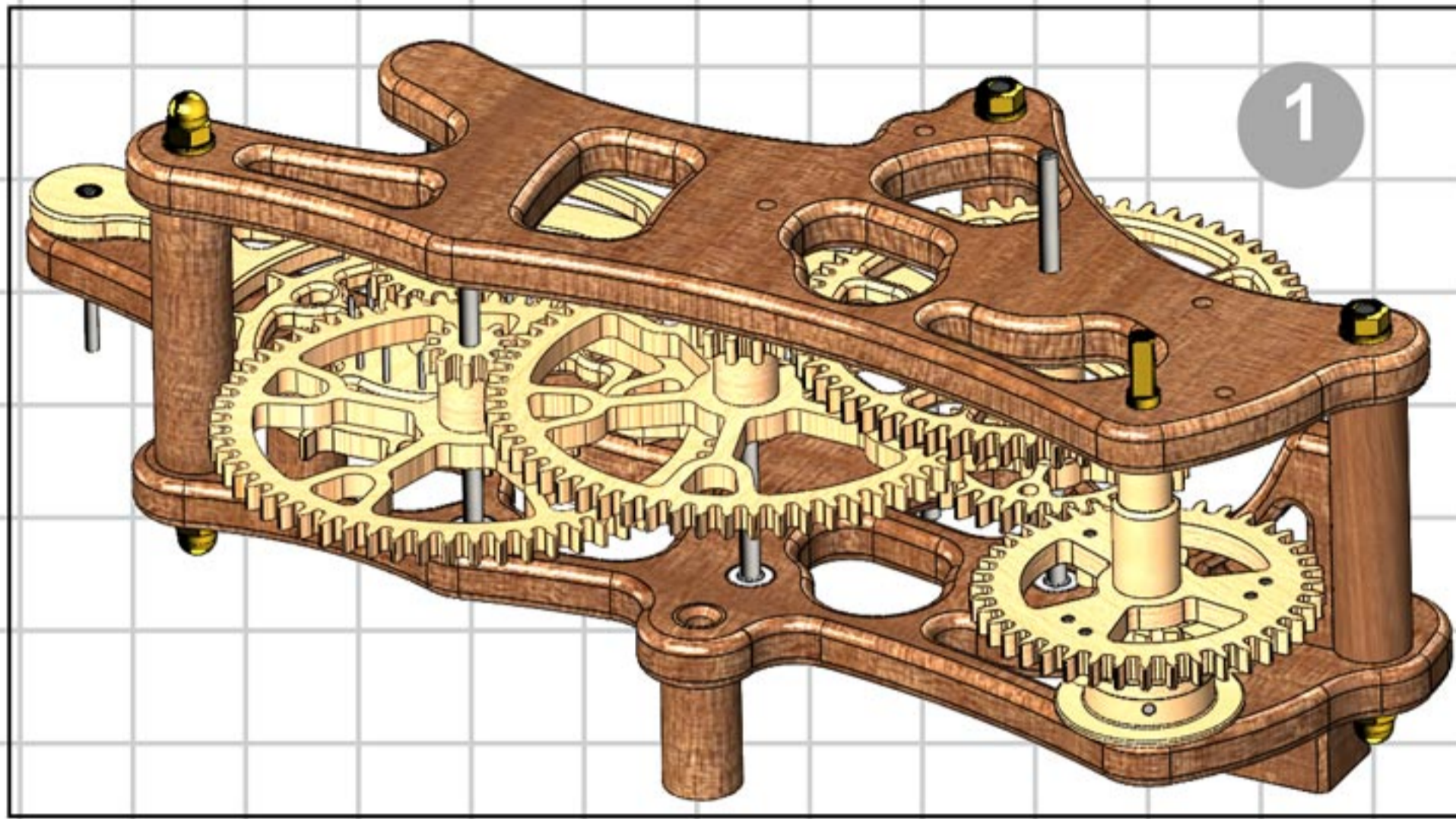
Fit the Escape wheel with its 15 pins and then mount it and the 15 tooth gear to the shaft.



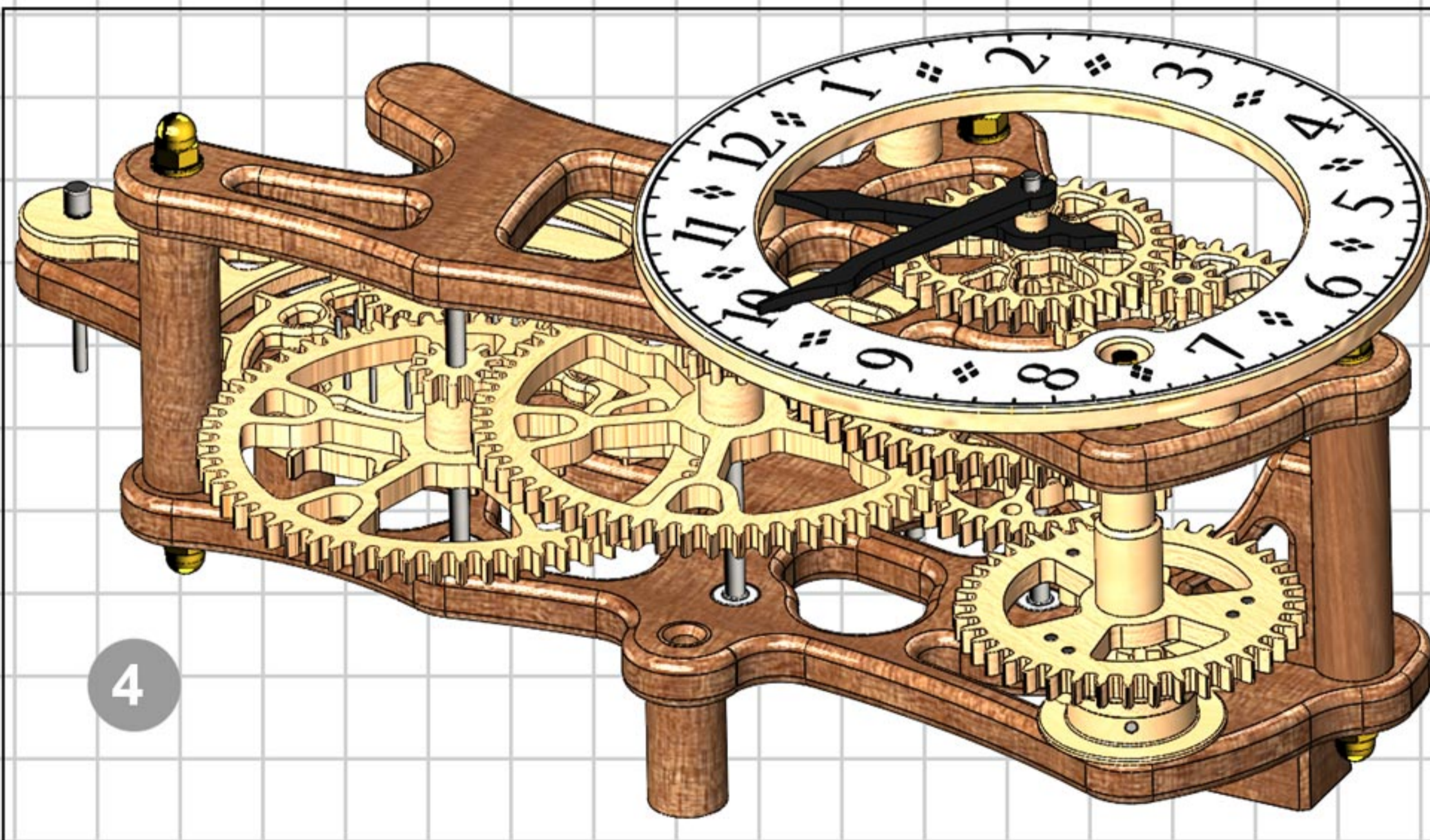
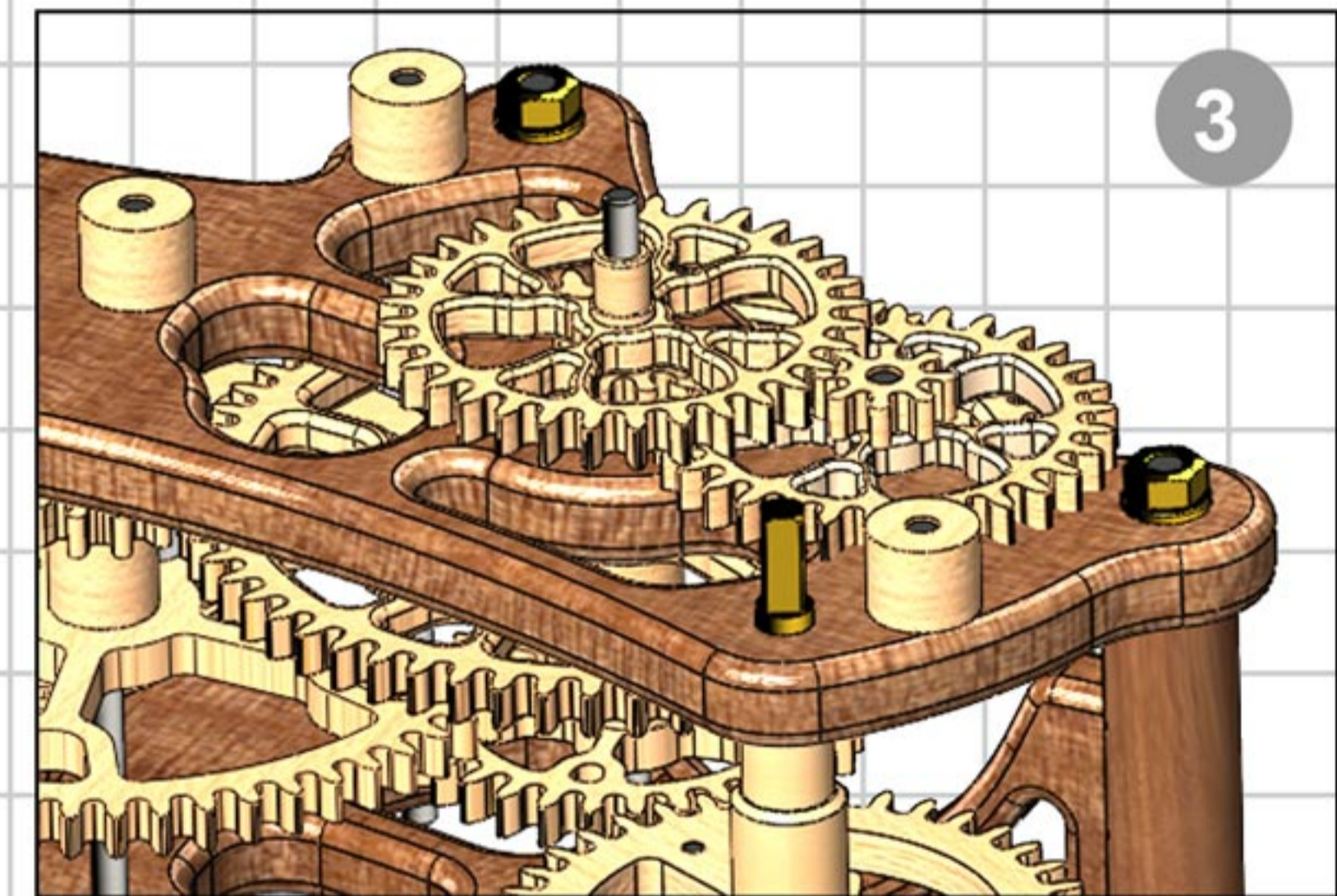


Assemble the rest of the Gear train assemblies  
and fit into the bearings on the Back Frame

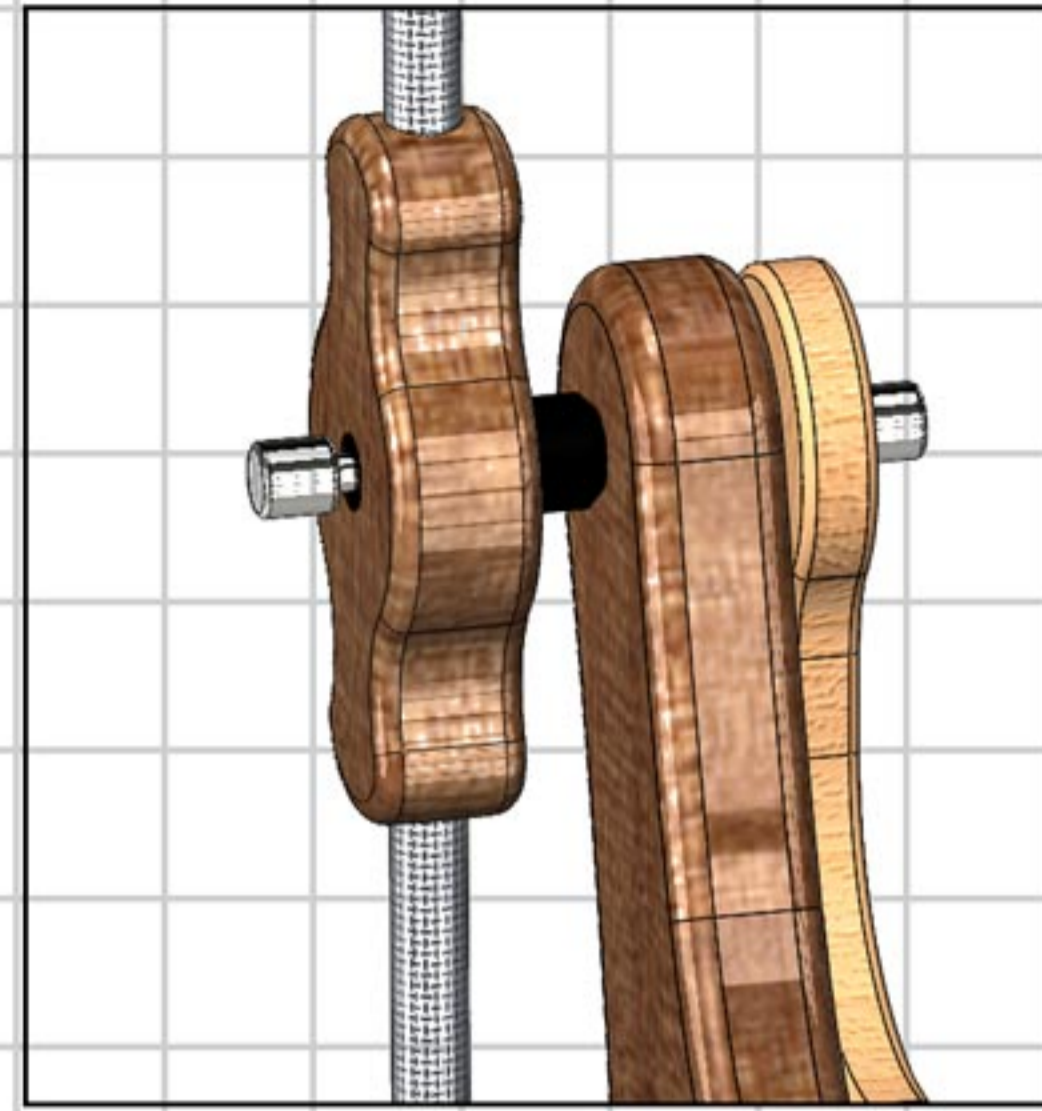
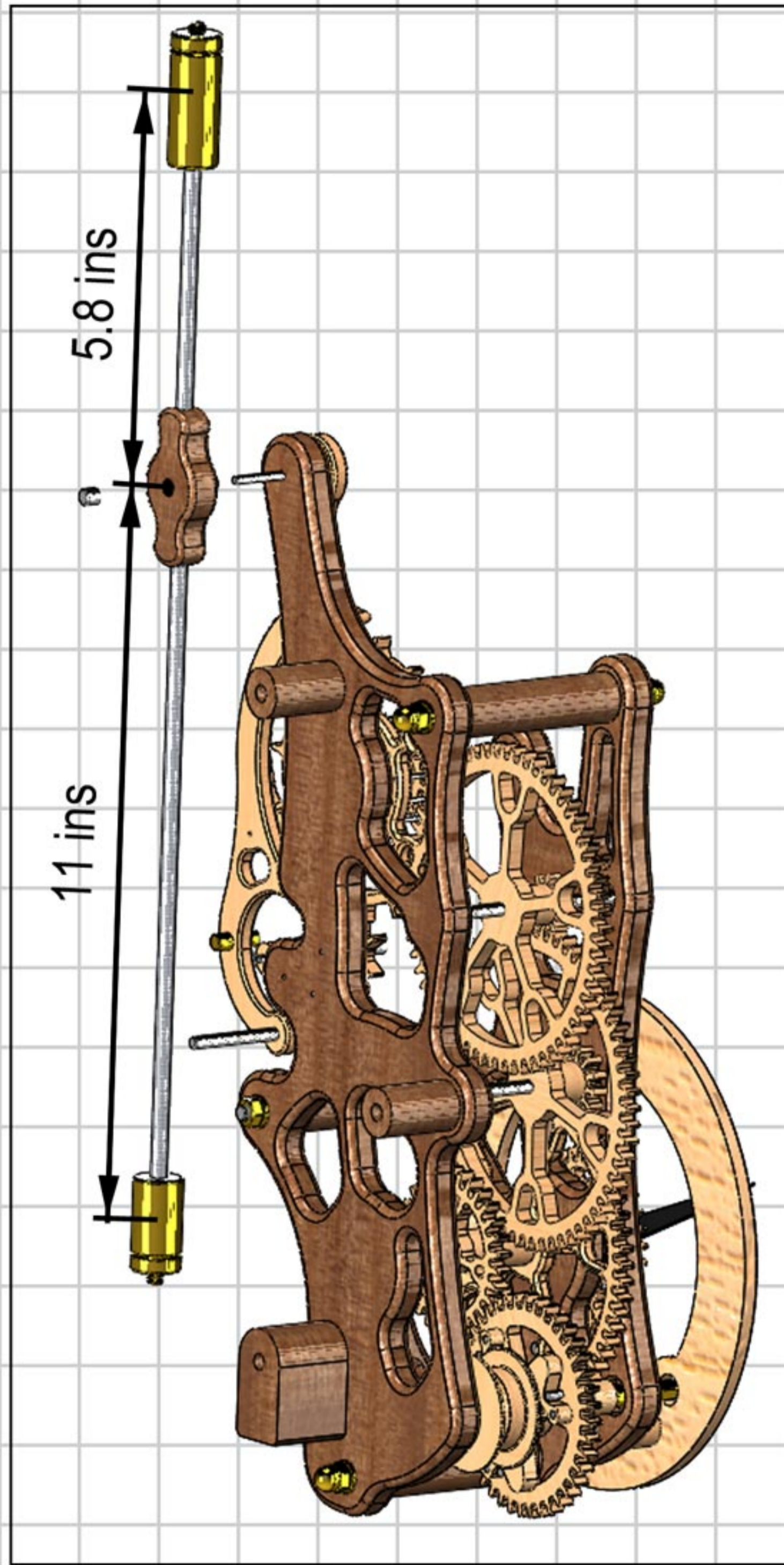




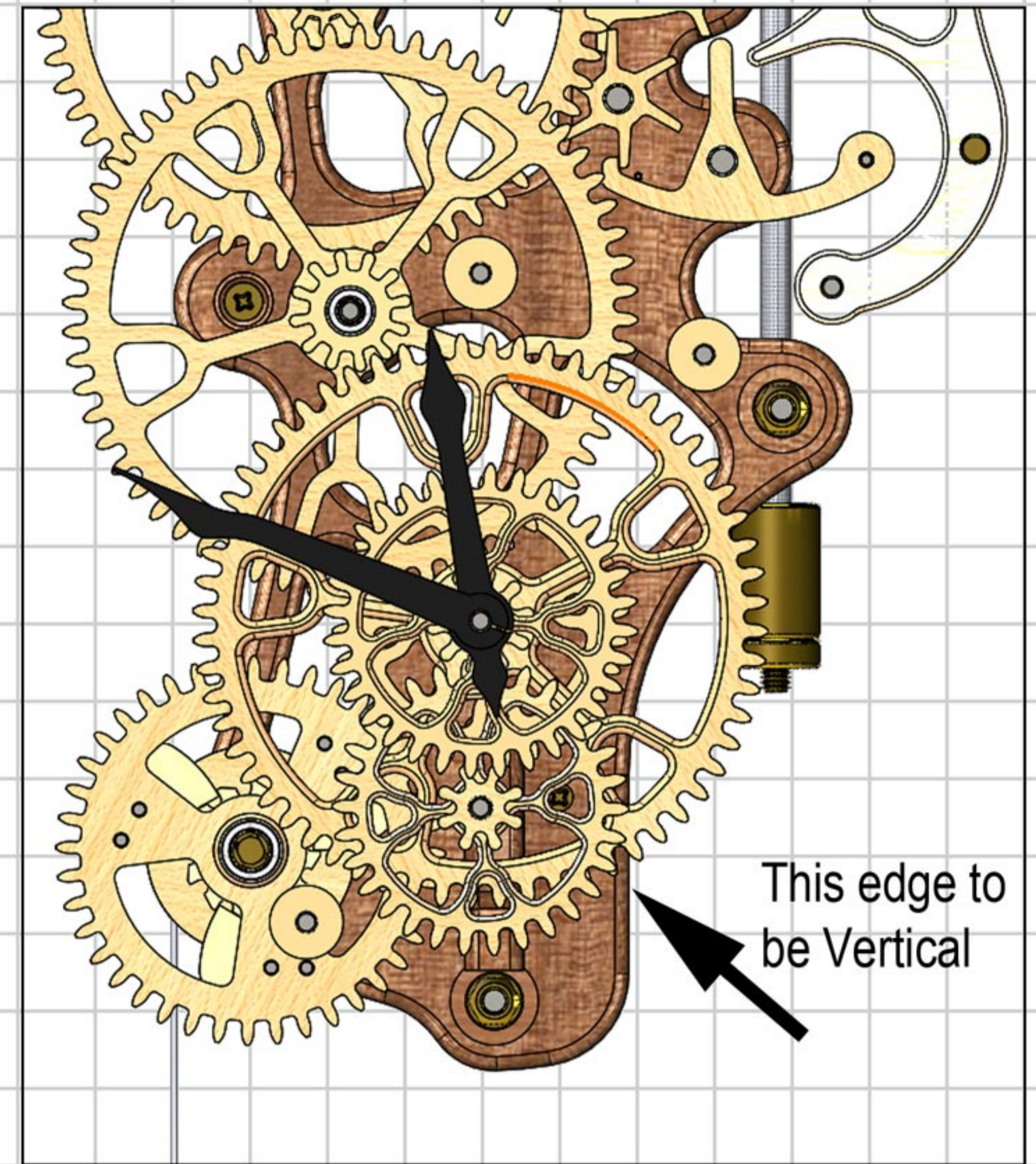
- 1 - Fit the Front Frame into position over the Threaded Rods and bolt in position.
- 2 - Fit the Dial spacers and the Hour Gear pivot pin.
- 3 - Fit the Hour gears
- 4 - Fit the Hands and the dial.



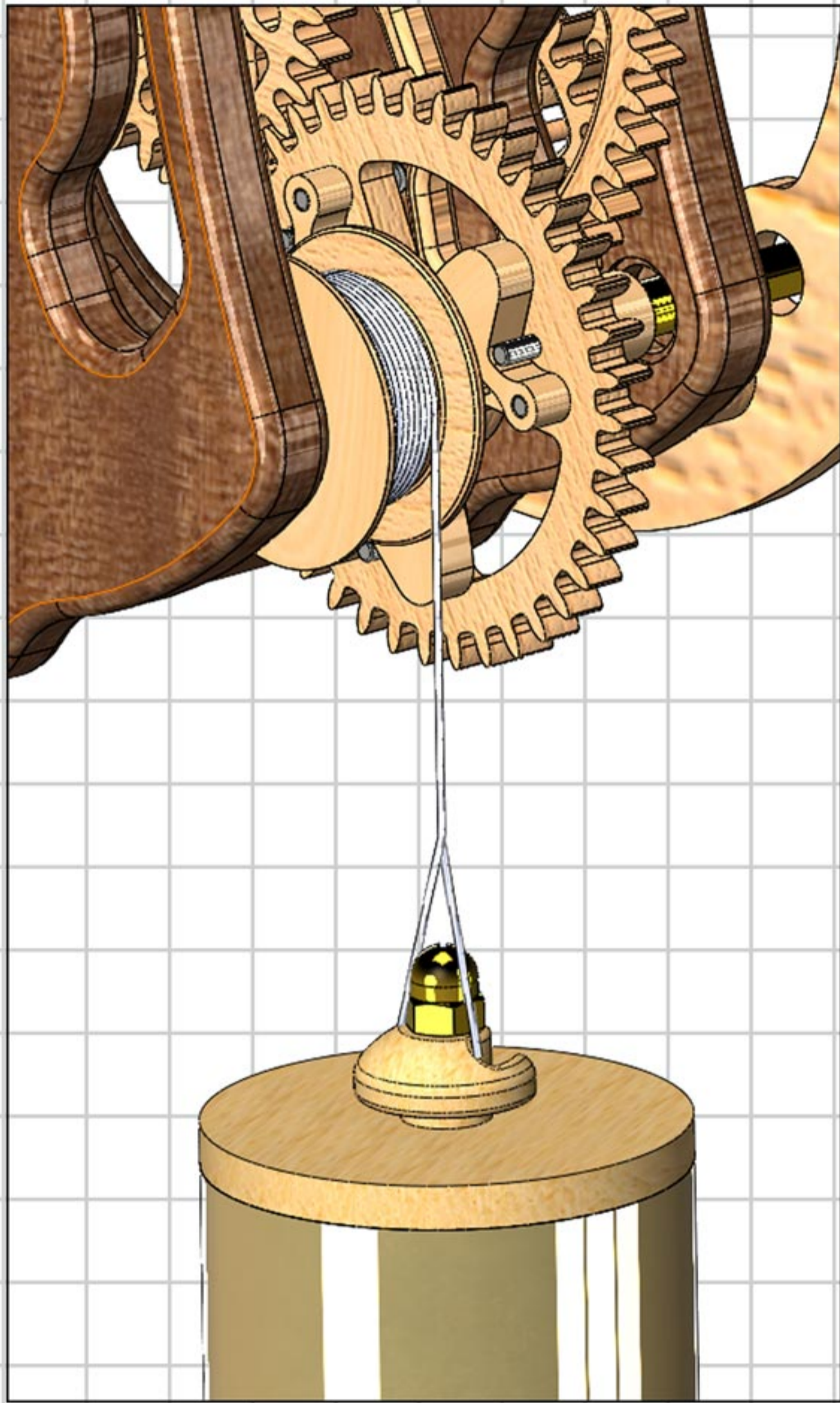
# Epicyclic Gear Assembly



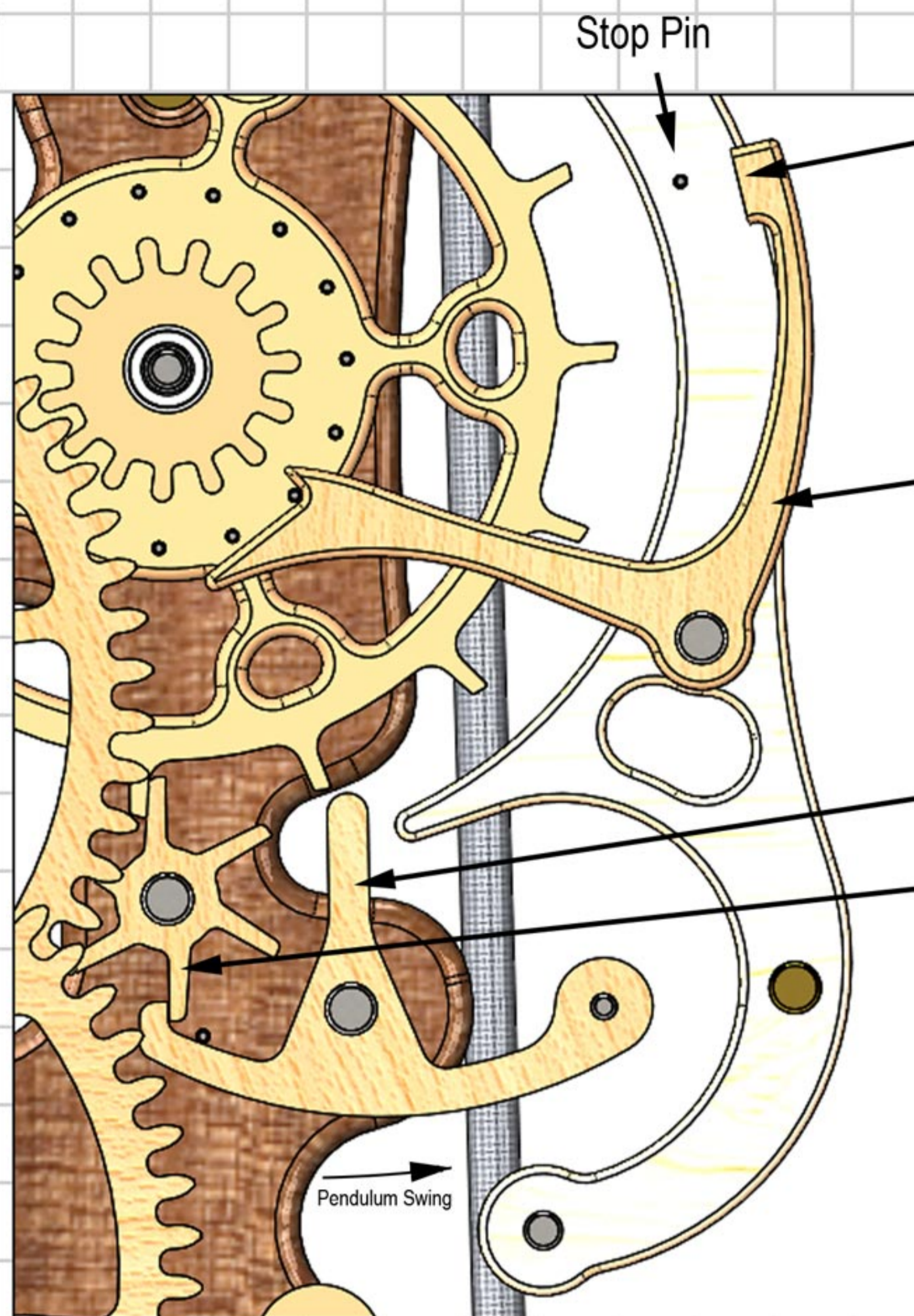
Assemble the Pendulum with the weights at the positions indicated on the illustration, this will give a good starting point for adjustment



Mount the clock to the wall using the 3 wood screws making sure that the bottom edge of the frame is vertical, this will ensure that the Gravity Escapement will hang in its correct position.



Wrap the cord around the drum so that it hangs from the drum as shown above.  
Use a Bowline Knot in the end of the cord to secure the Weight. Start with a weight of around 4.5 lbs.



Stop Pin

Adjust this face on the lifting Lever to make sure the the fork on the end here engages centrally with the Pin

Lifting Lever

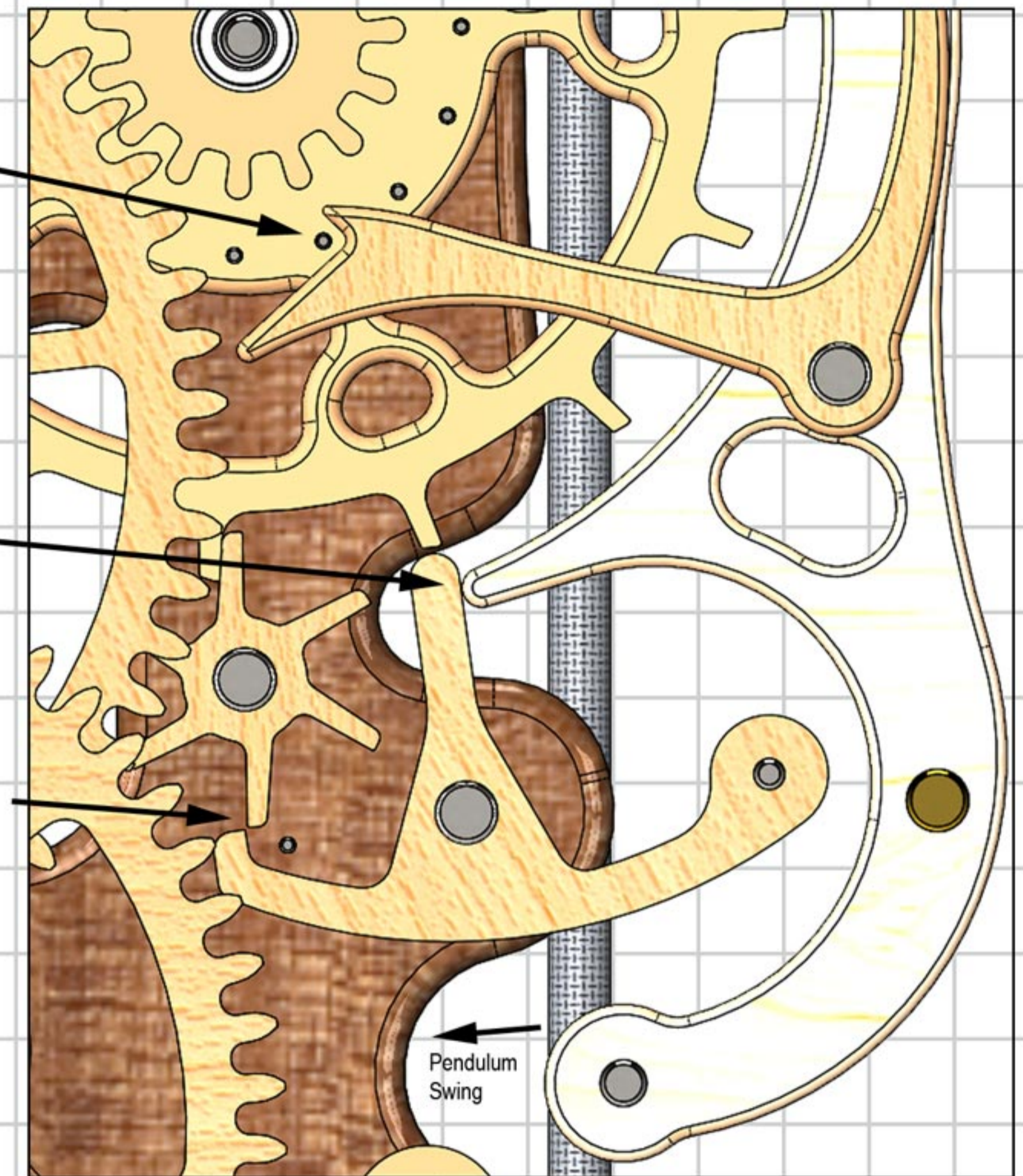
Trigger being pushed by the Gravity arm

Trigger

Catch

Pendulum Swing

The illustration above shows the state all the parts as the pendulum rod swings towards the right to push the Gravity arm slightly to release the Lifting Lever so that it drops down until the top end hits its stop pin. Note the Escape wheel is locked by the Catch which in turn is held in position by the Trigger.



Catch just released

Pendulum Swing

The Pendulum is now swinging back and is being pushed by the Gravity Arm giving it a small push. The Nose on the Gravity arm is pushing the trigger to release the catch. You will need to make small tweaks to all the parts to ensure the Trigger is released before the fork on the Lifting lever hits the pin it is headed for, if this doesn't happen then the mechanism will lock up and stop the clock.