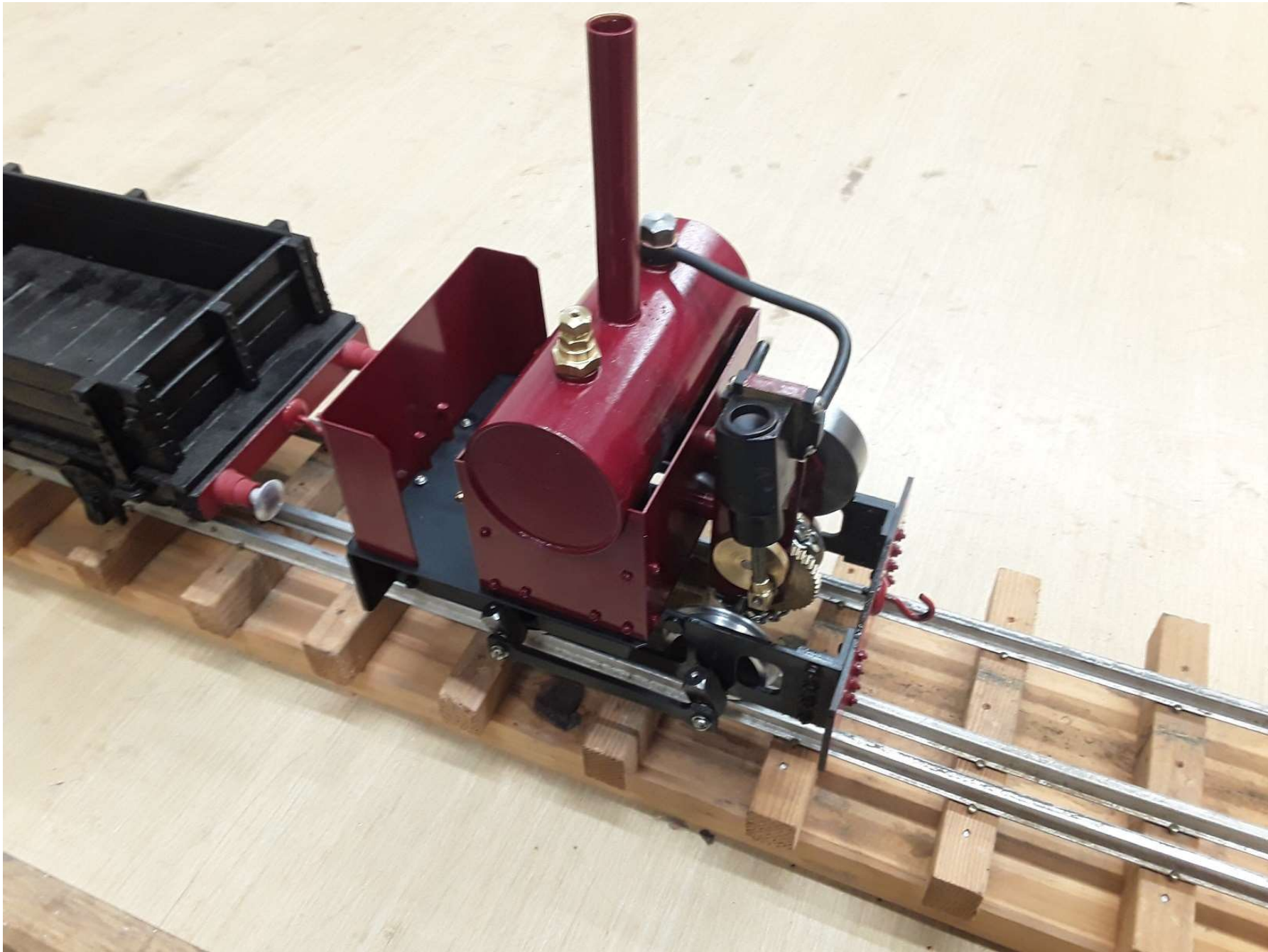


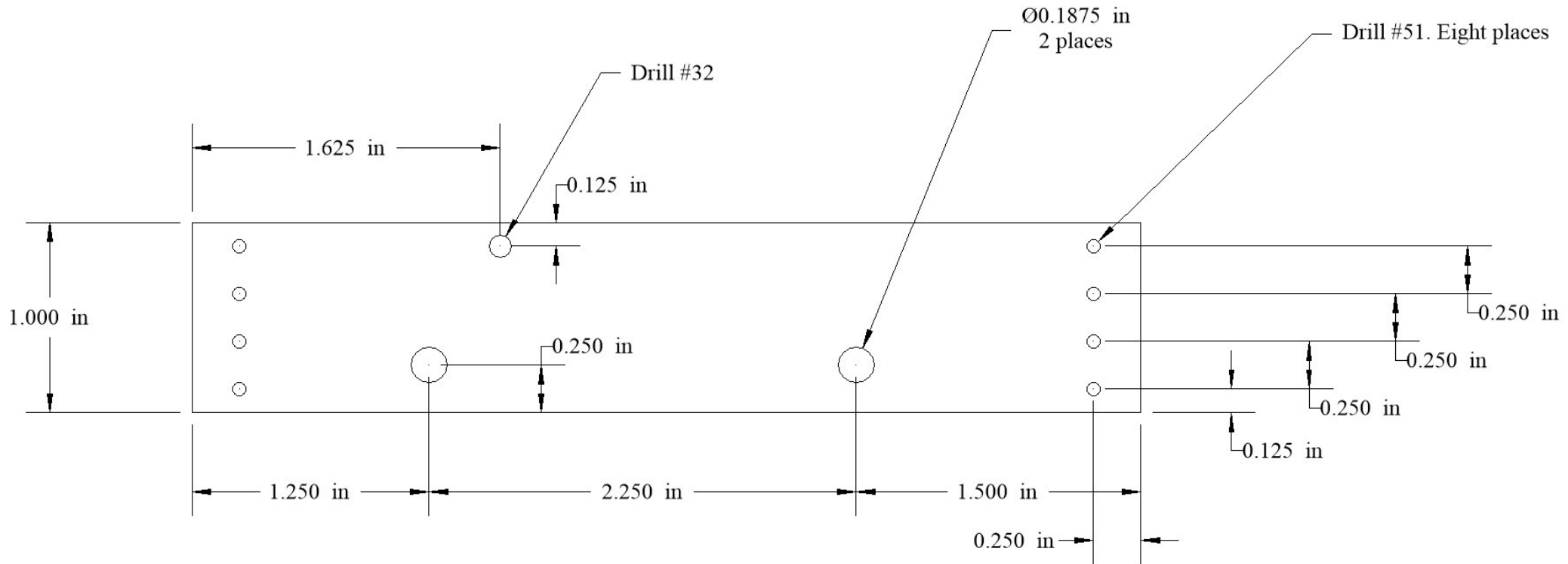
Steam in the Garden, the lost articles

Part Two, Tram Engine Build

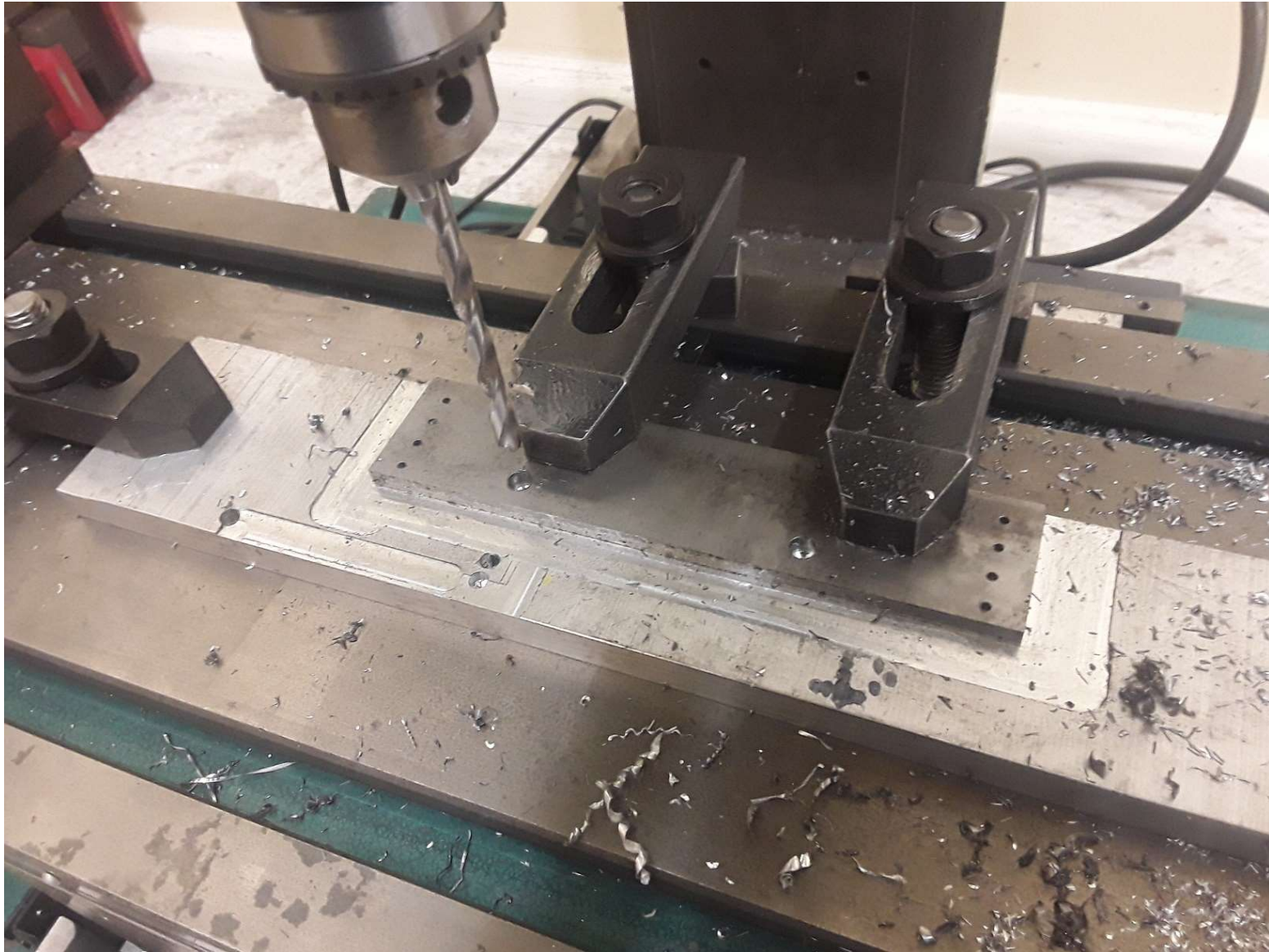


Side Frame

Side Frame, 16 ga steel or brass



Side Frame

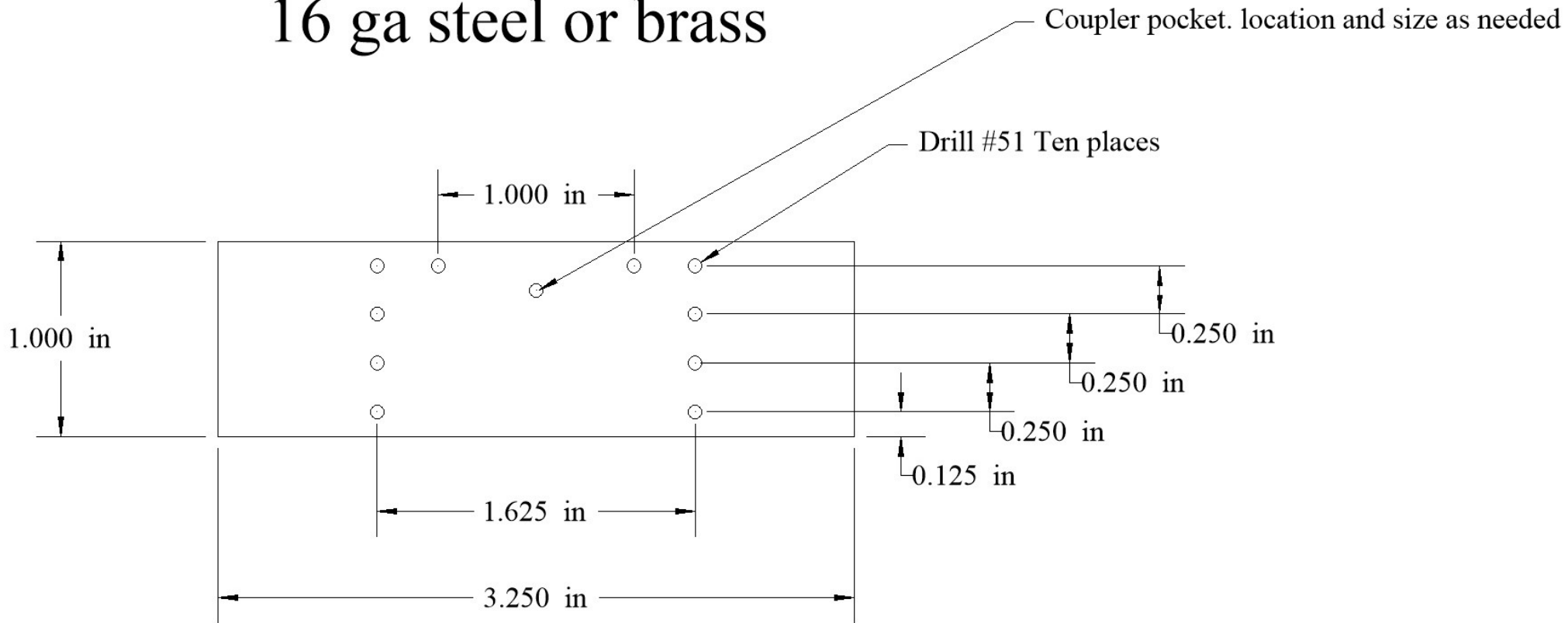


Side Frame



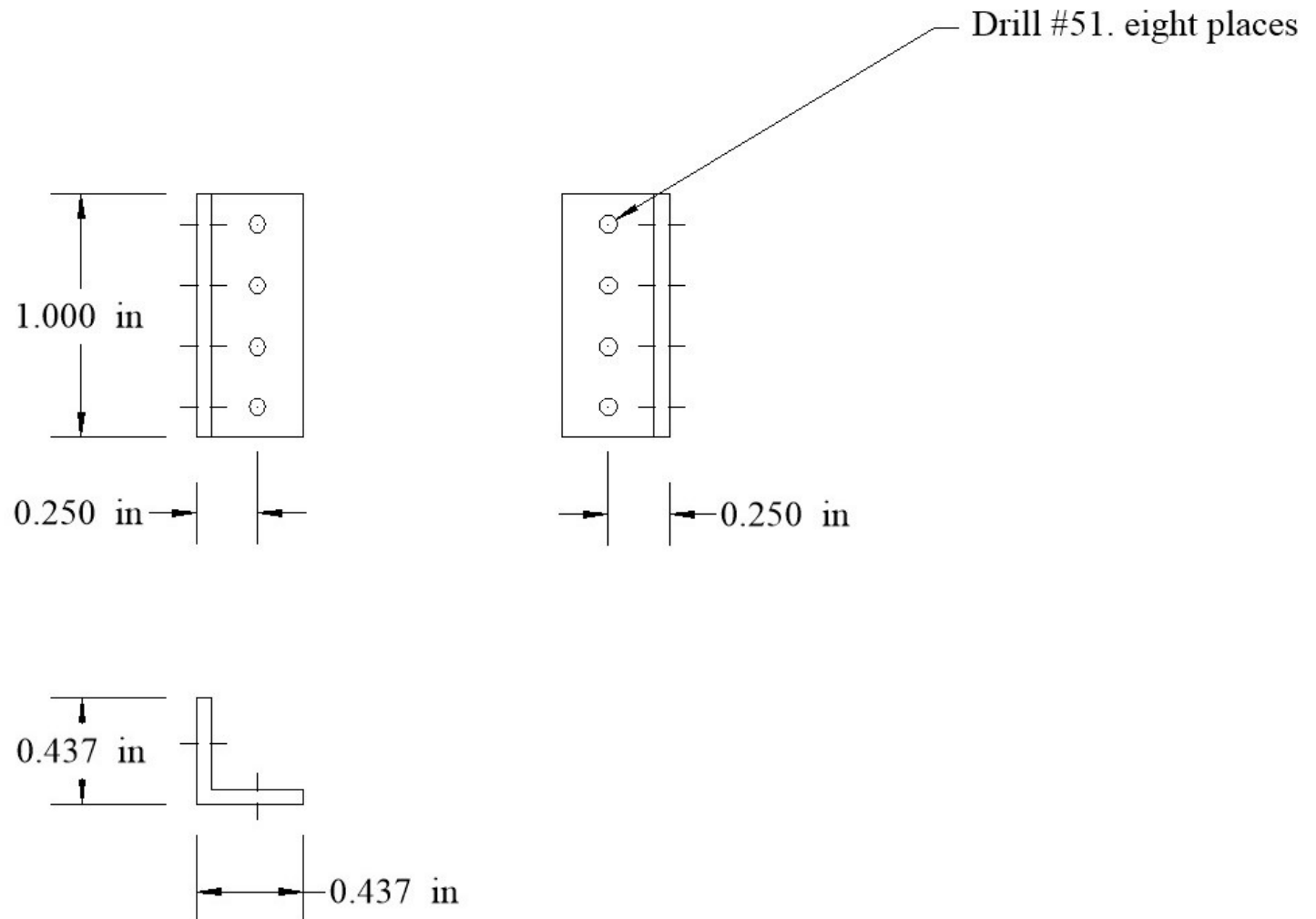
End Beam

16 ga steel or brass

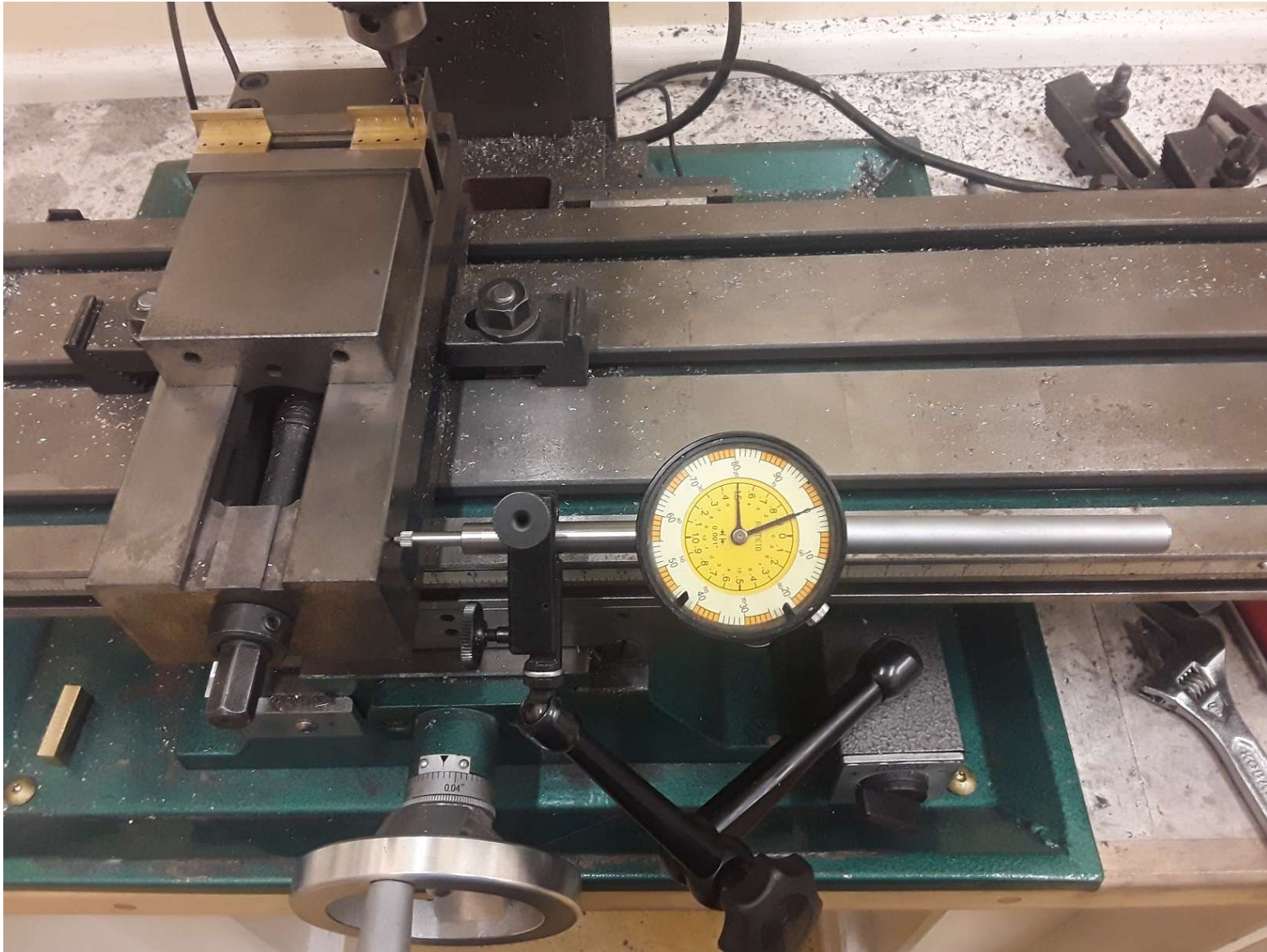


Frame Gussets

1/16" aluminum angle, 4 each

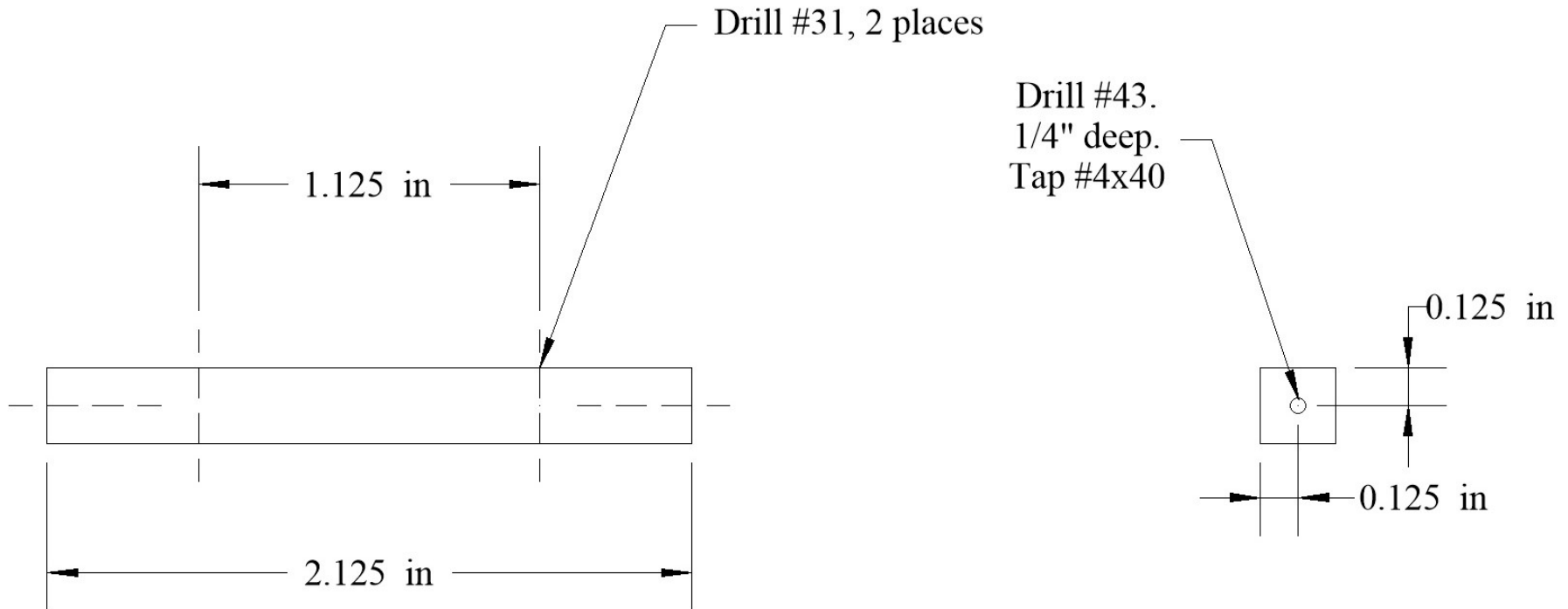


Frame Gussets

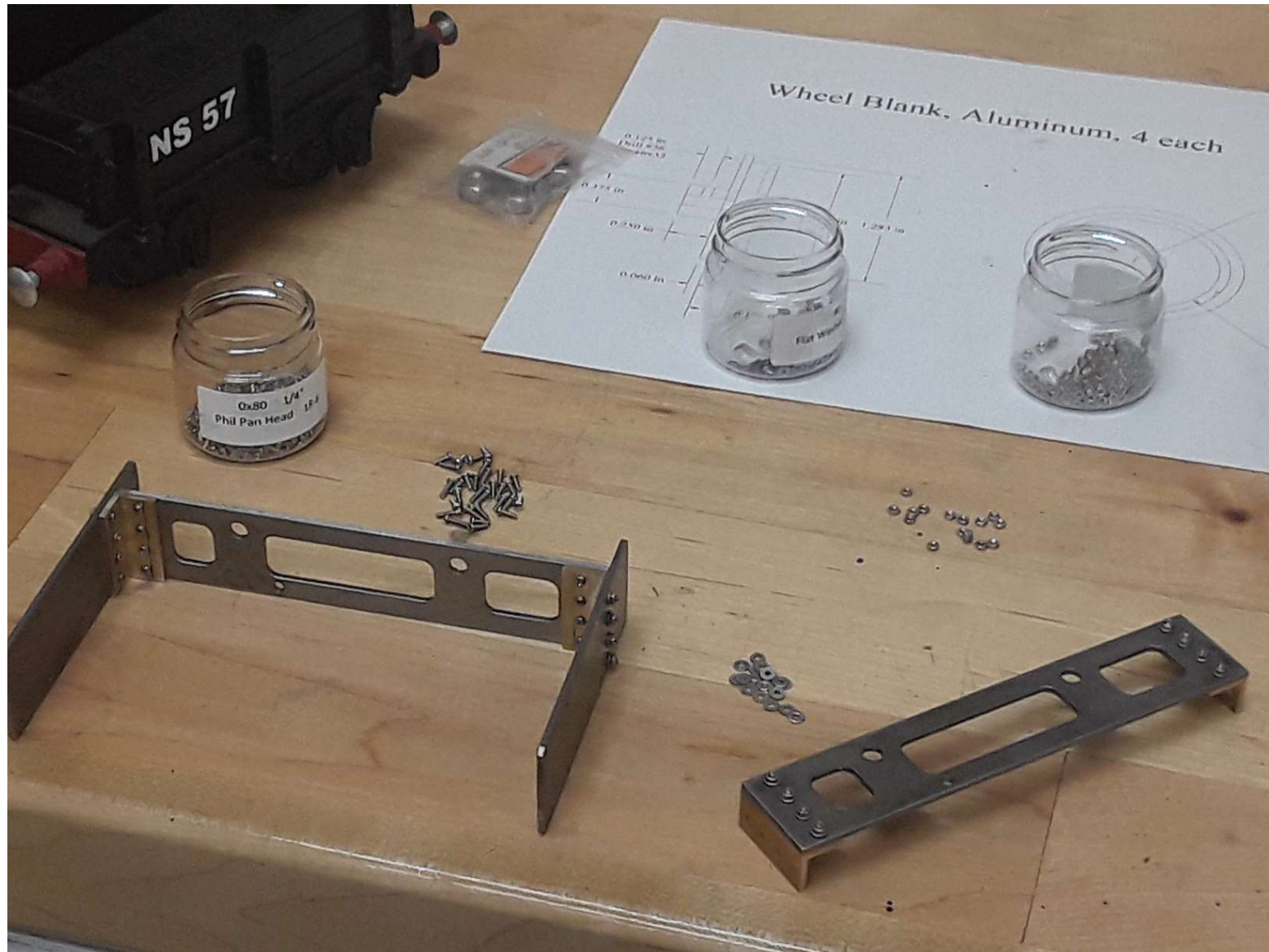


Frame Stretcher

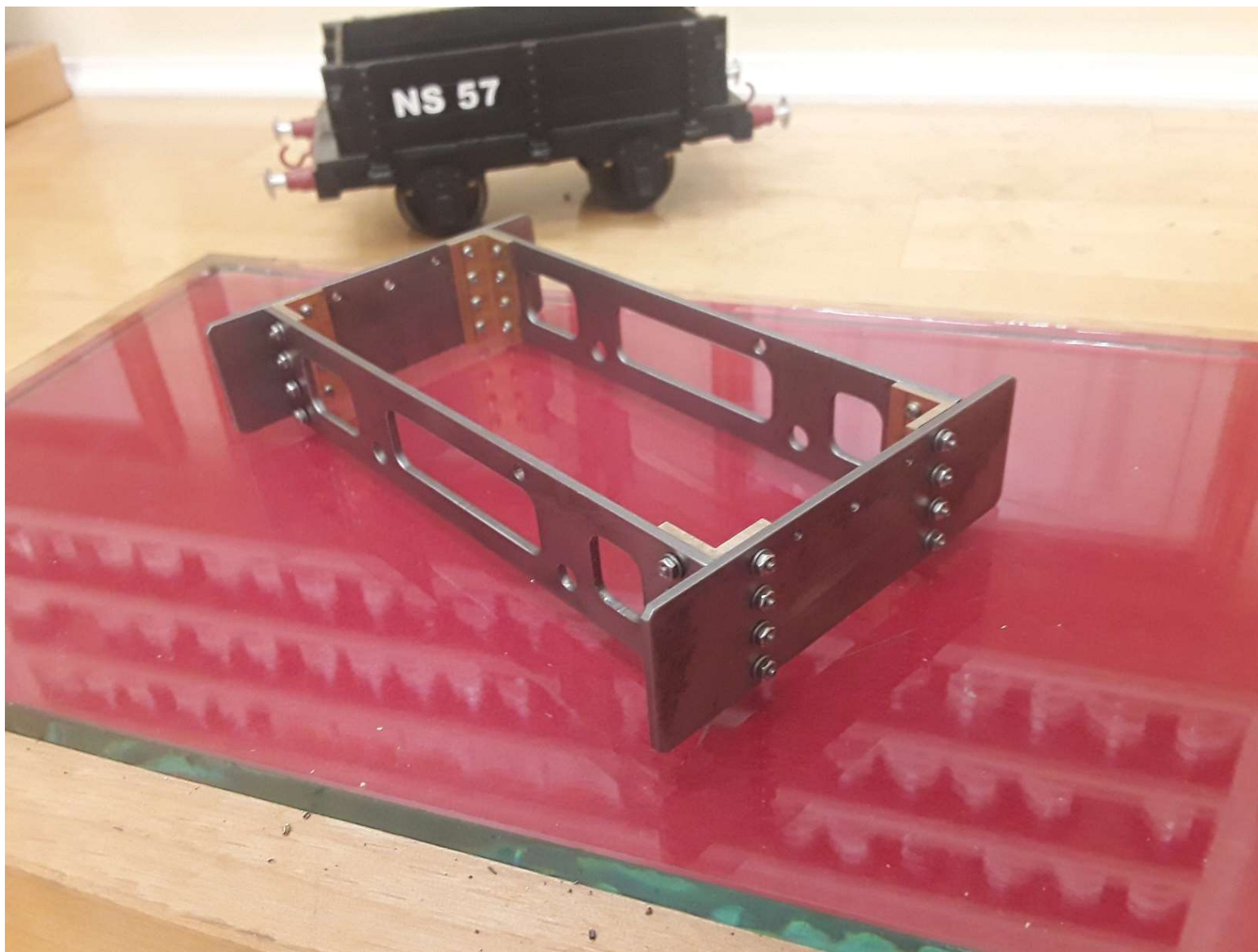
1/4" sq aluminum, 1 each



Frame Assembly

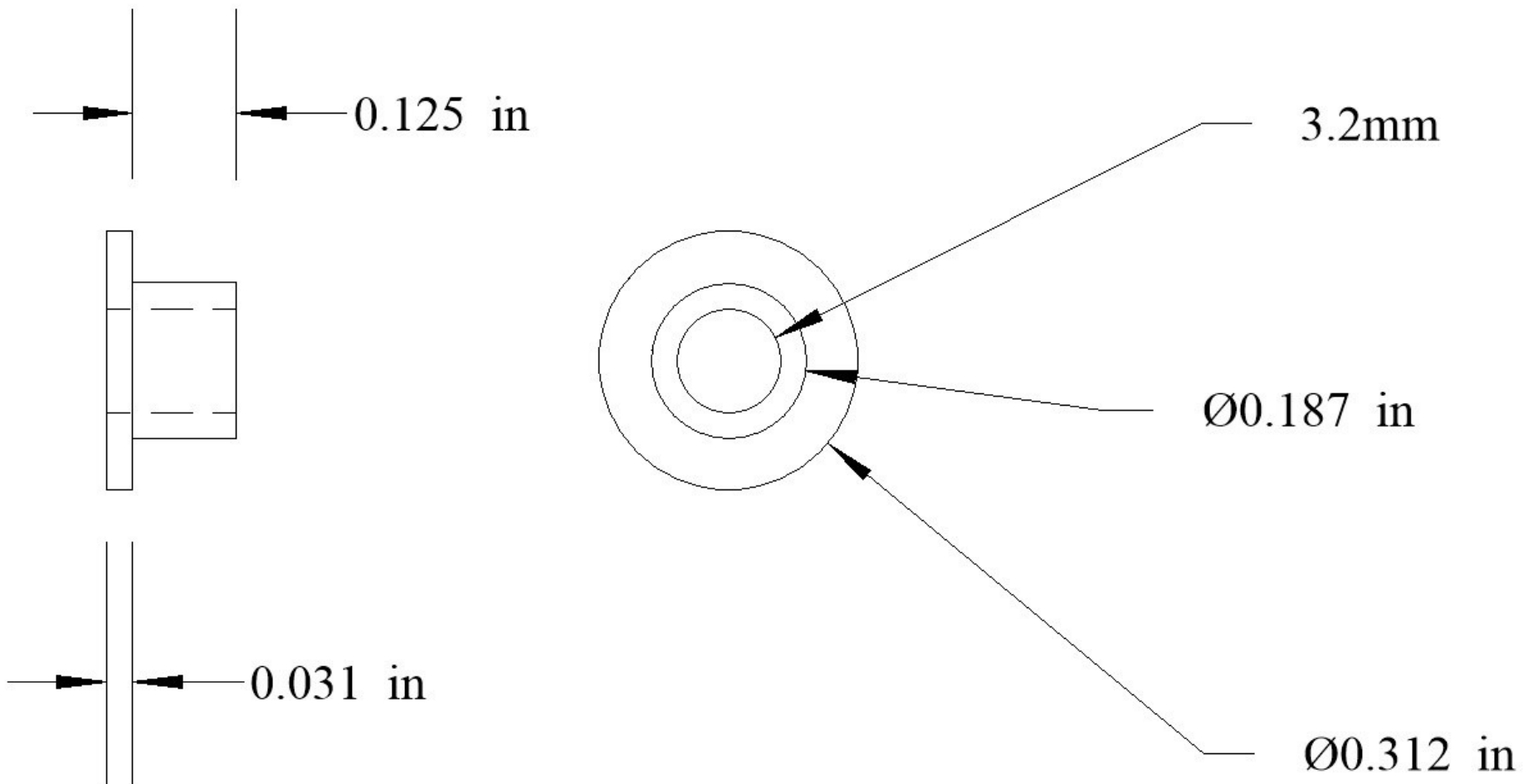


Frame Assembly



Main Bearings

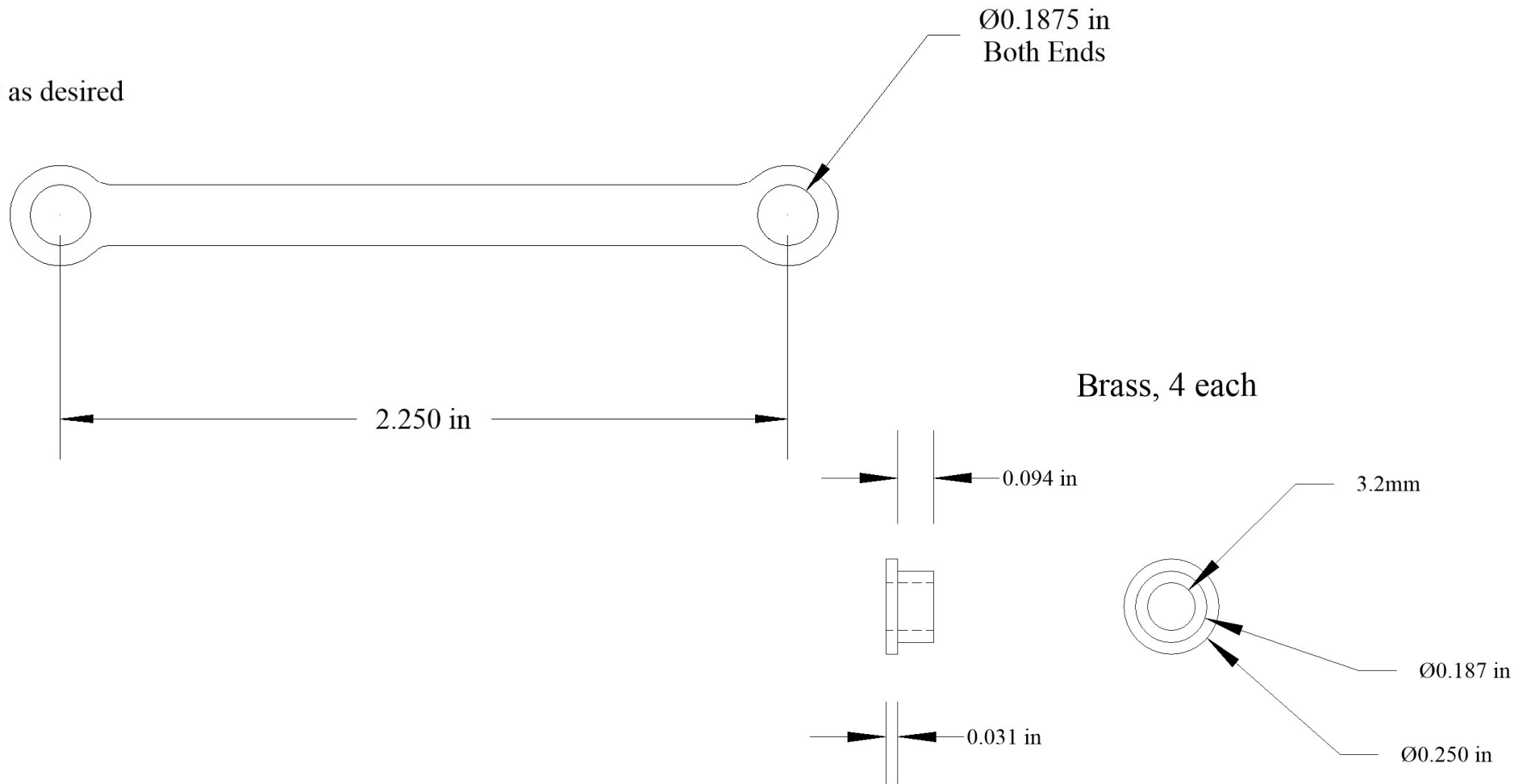
Brass, 4 each



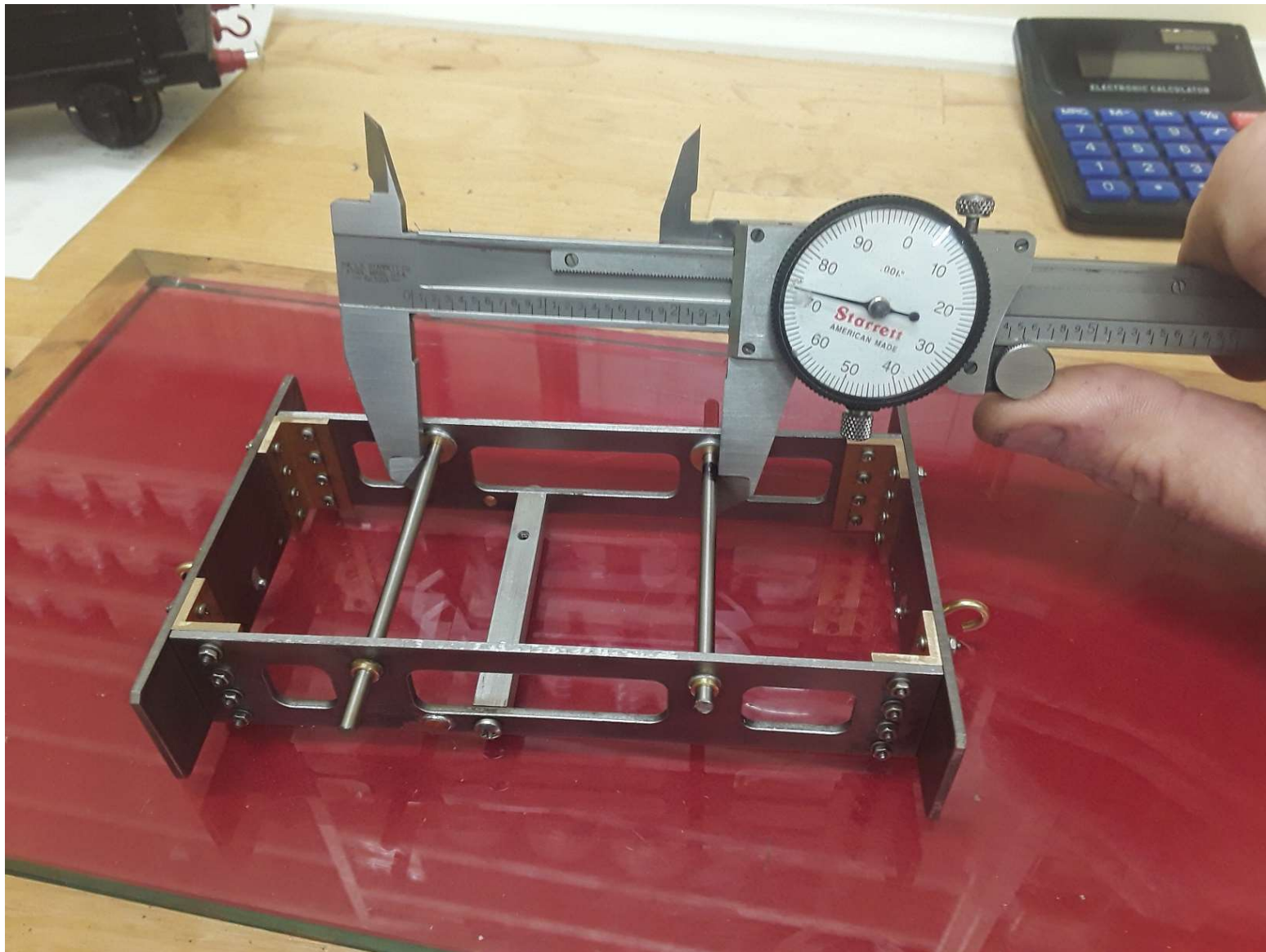
Side Rods

16 ga Steel, 2 each

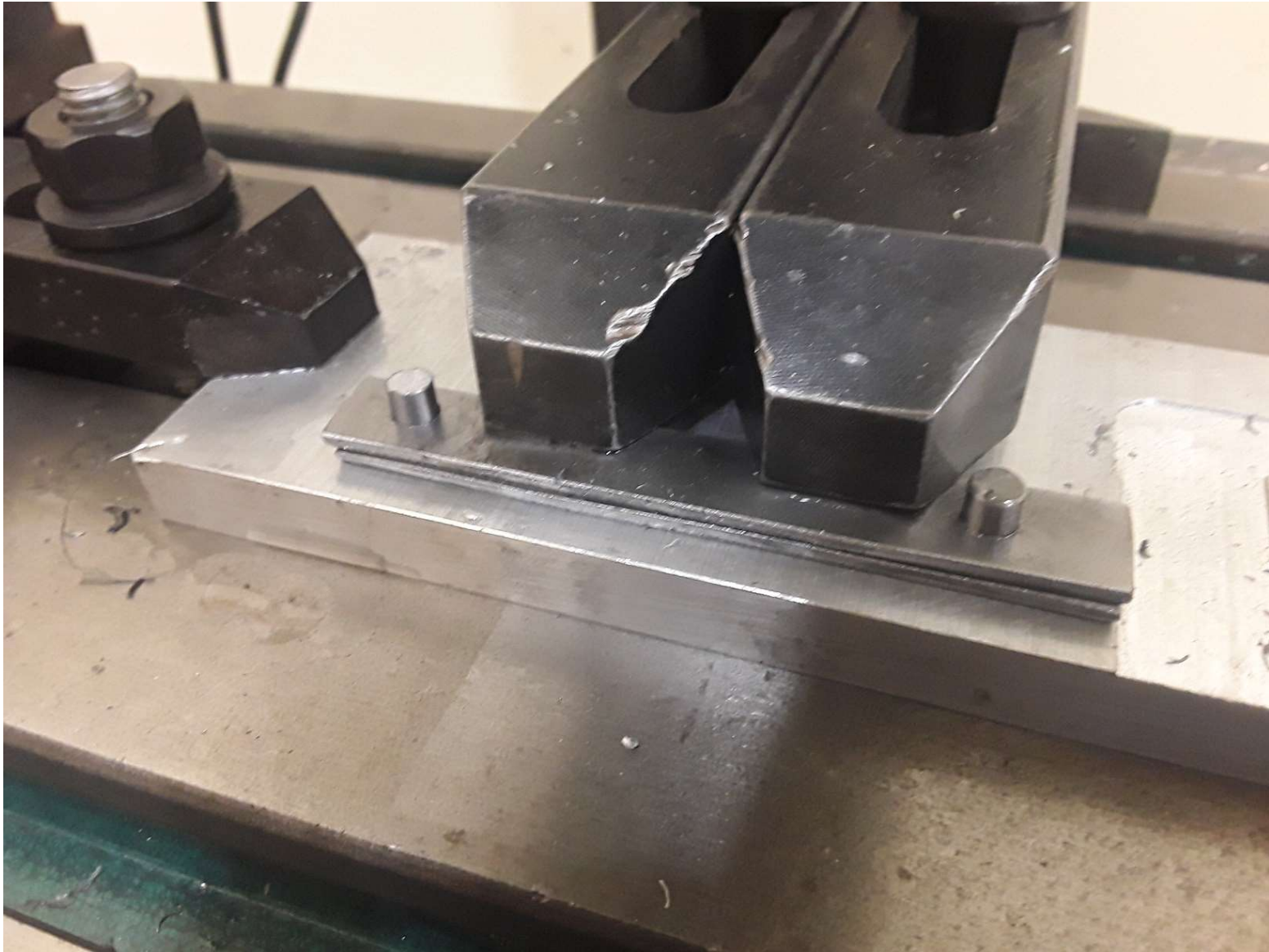
Profile as desired



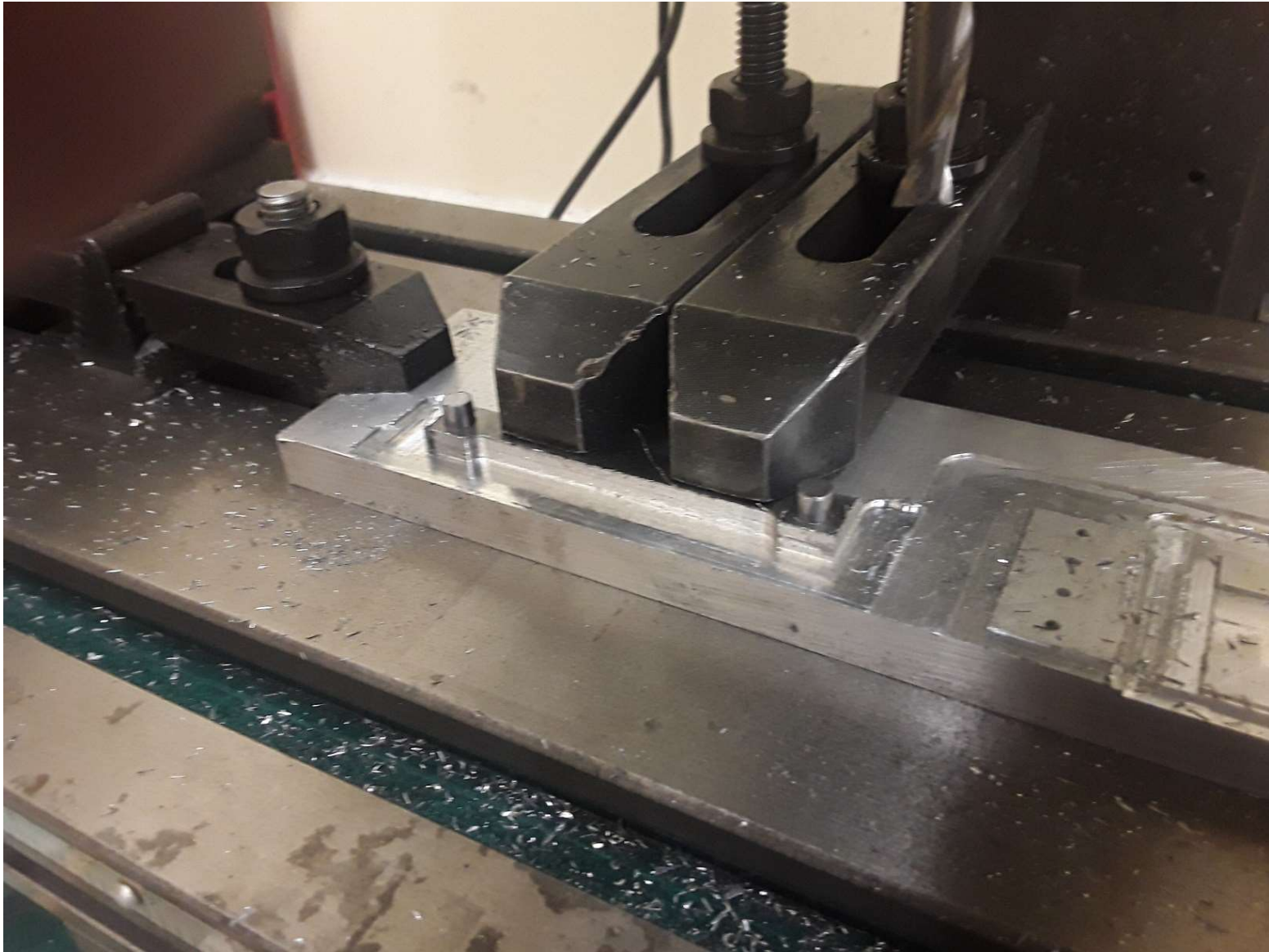
Side Rods



Side Rods



Side Rods



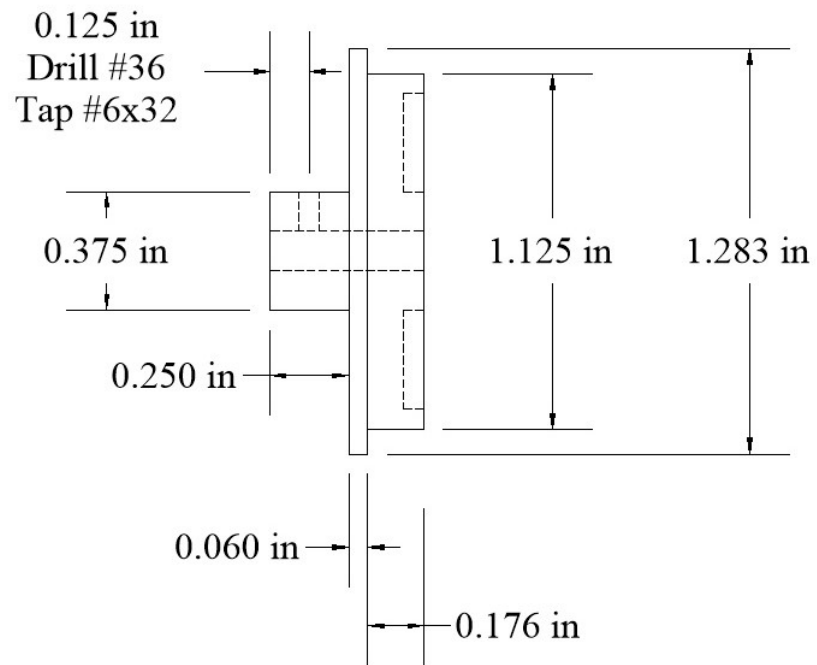
Side Rods



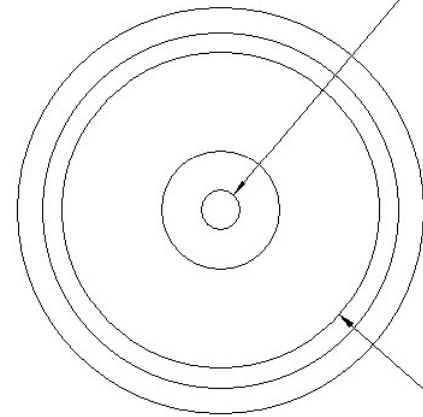
Wheels

Wheel Blank, Aluminum, 4 each

0.125 in
Drill #36
Tap #6x32



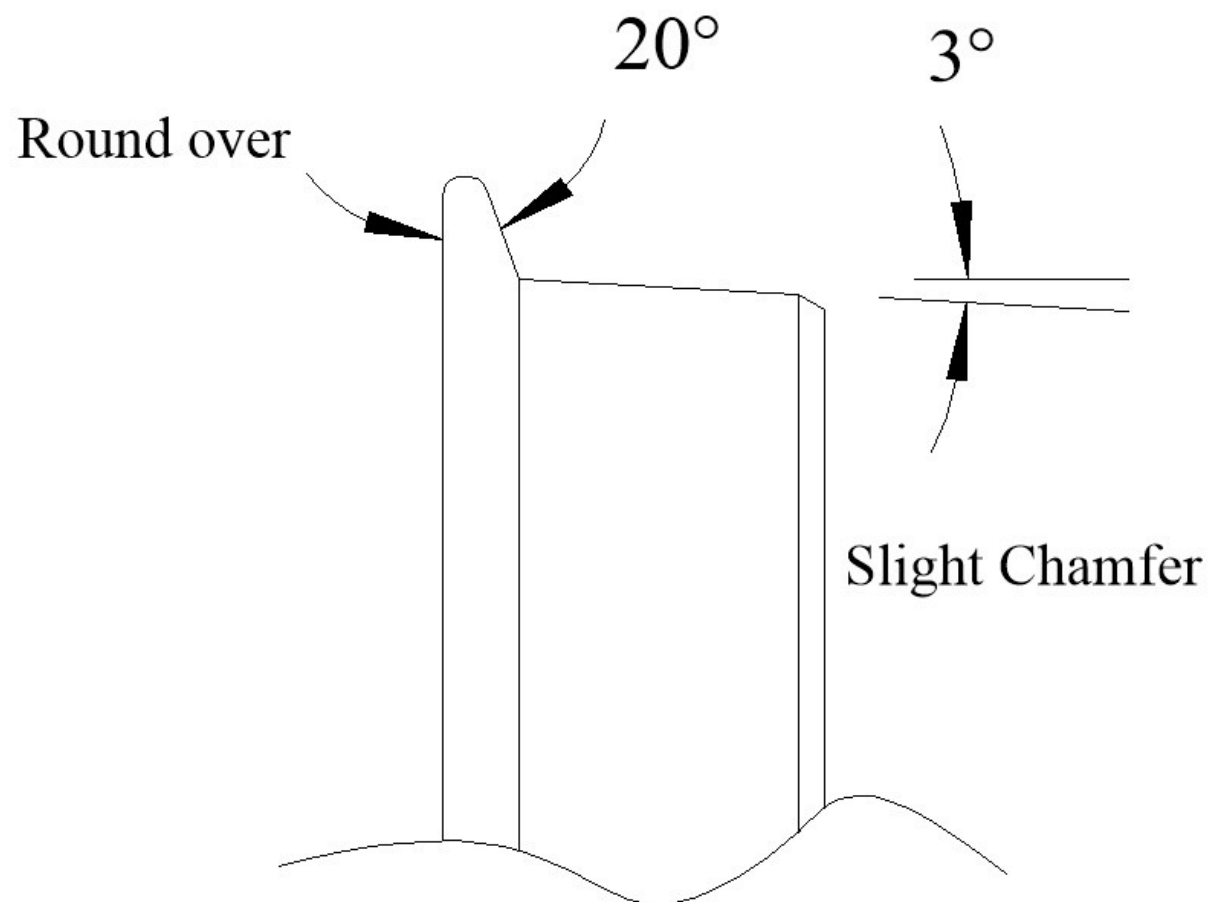
Drill #32. Ream 0.125"



Profile and recess as desired

Wheels

Wheel Profile



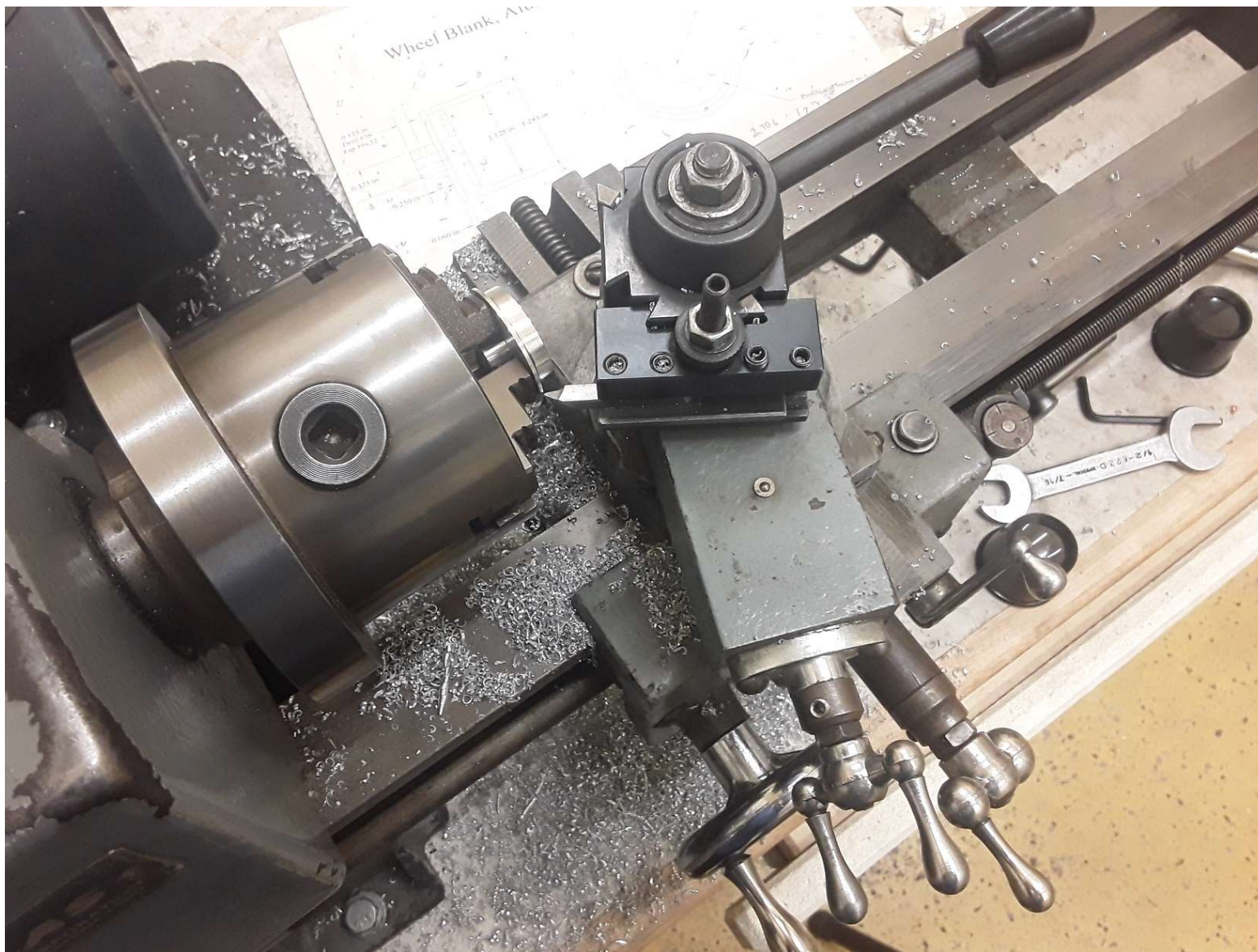
Wheels



Wheels



Wheels

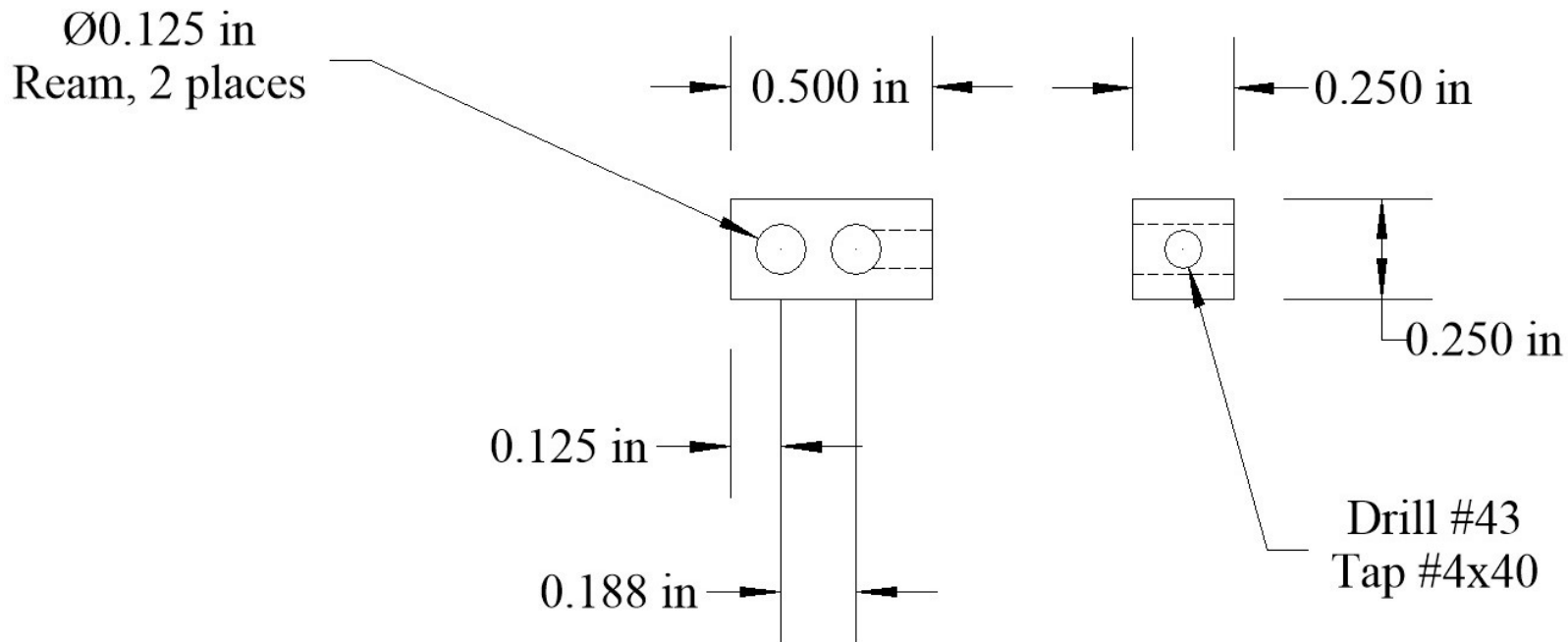


Wheels

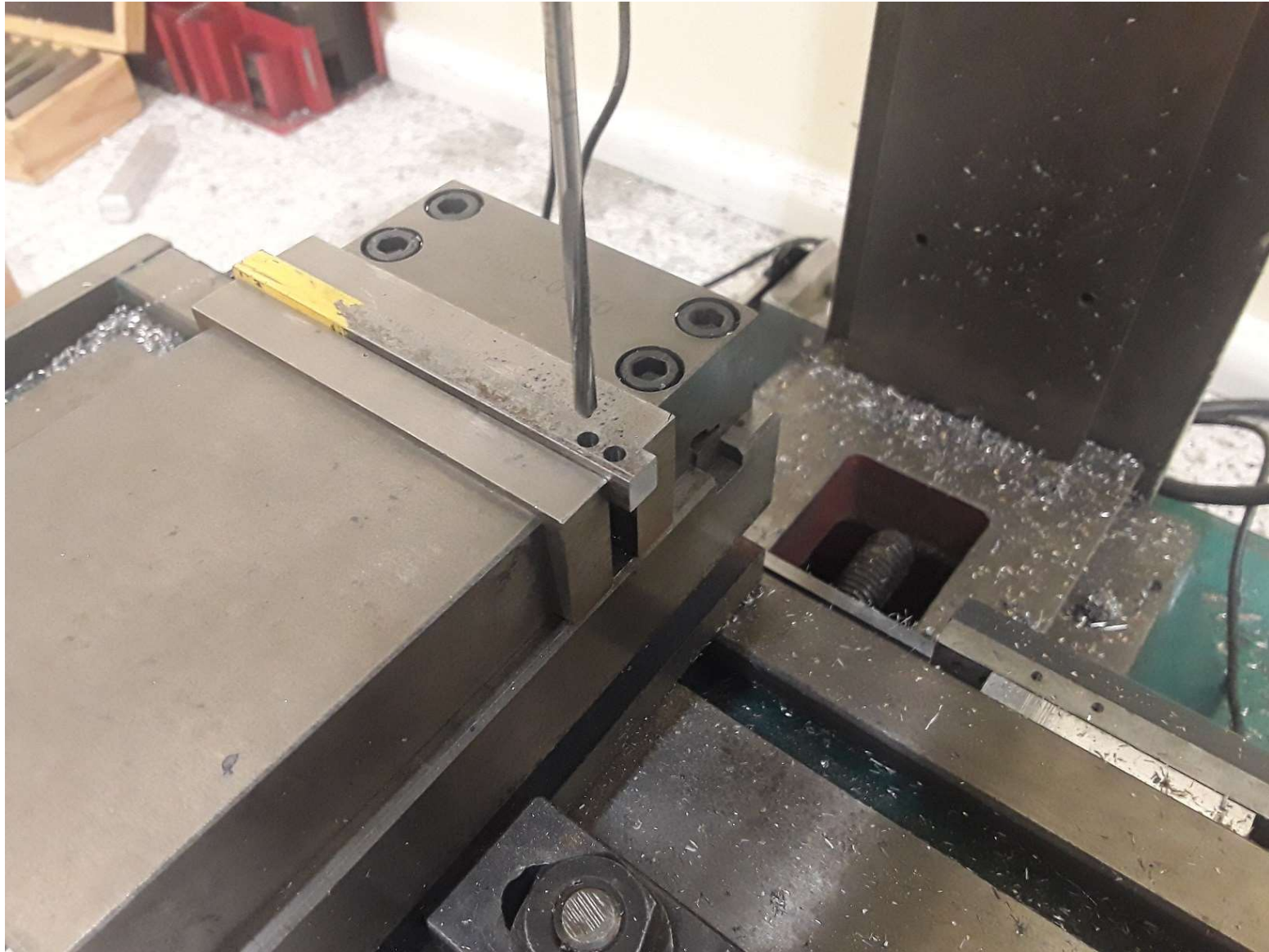


Wheel Cranks

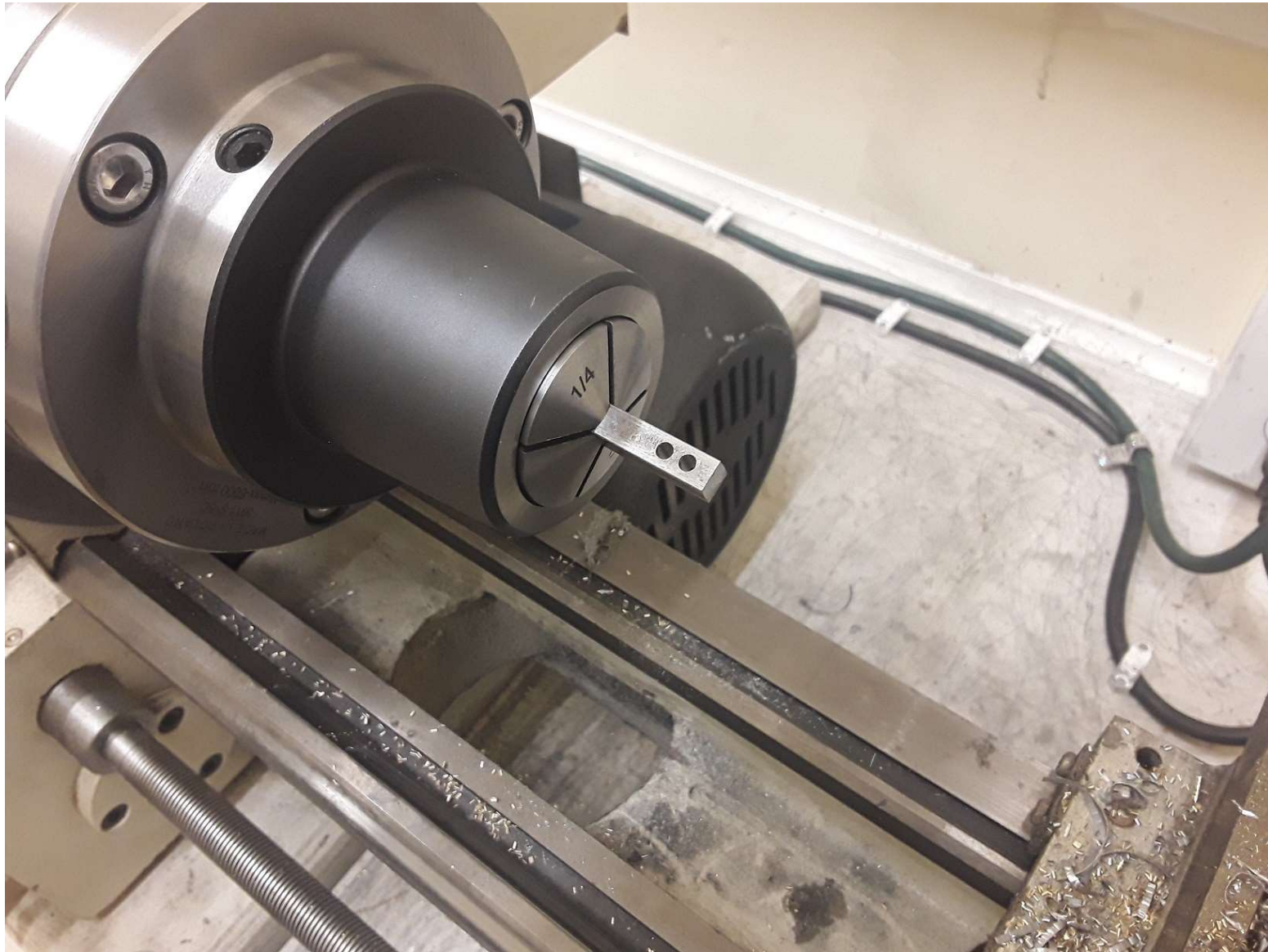
1/4" square steel or brass



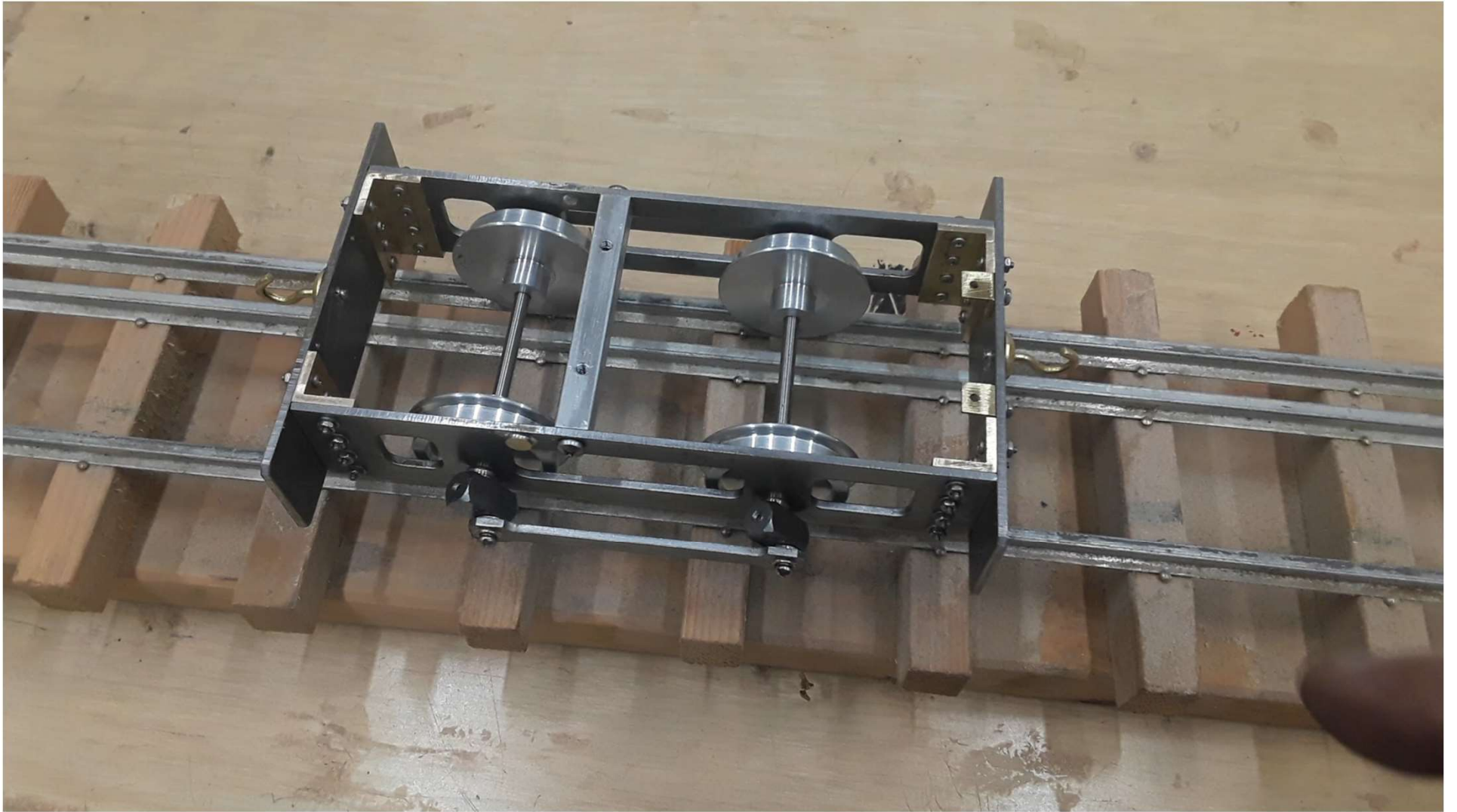
Wheel Cranks



Wheel Cranks



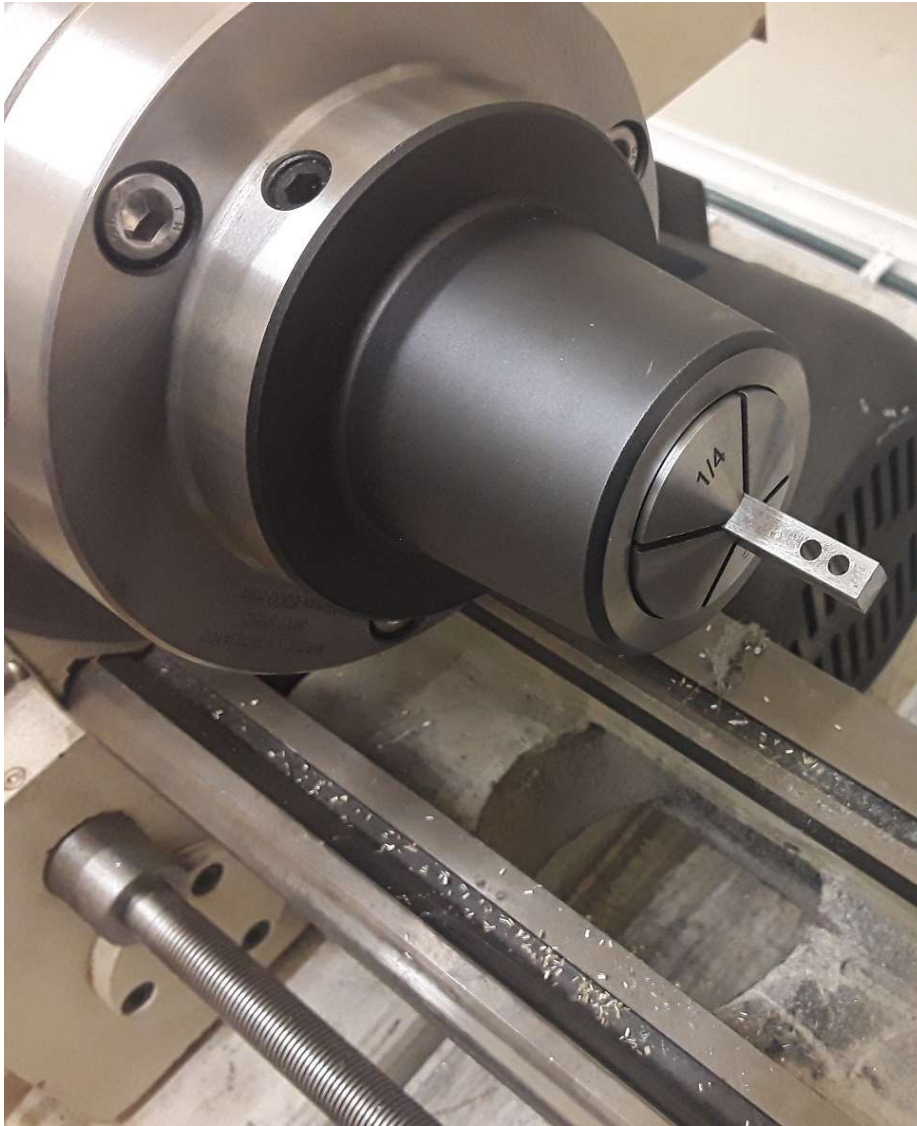
Rolling Chassis



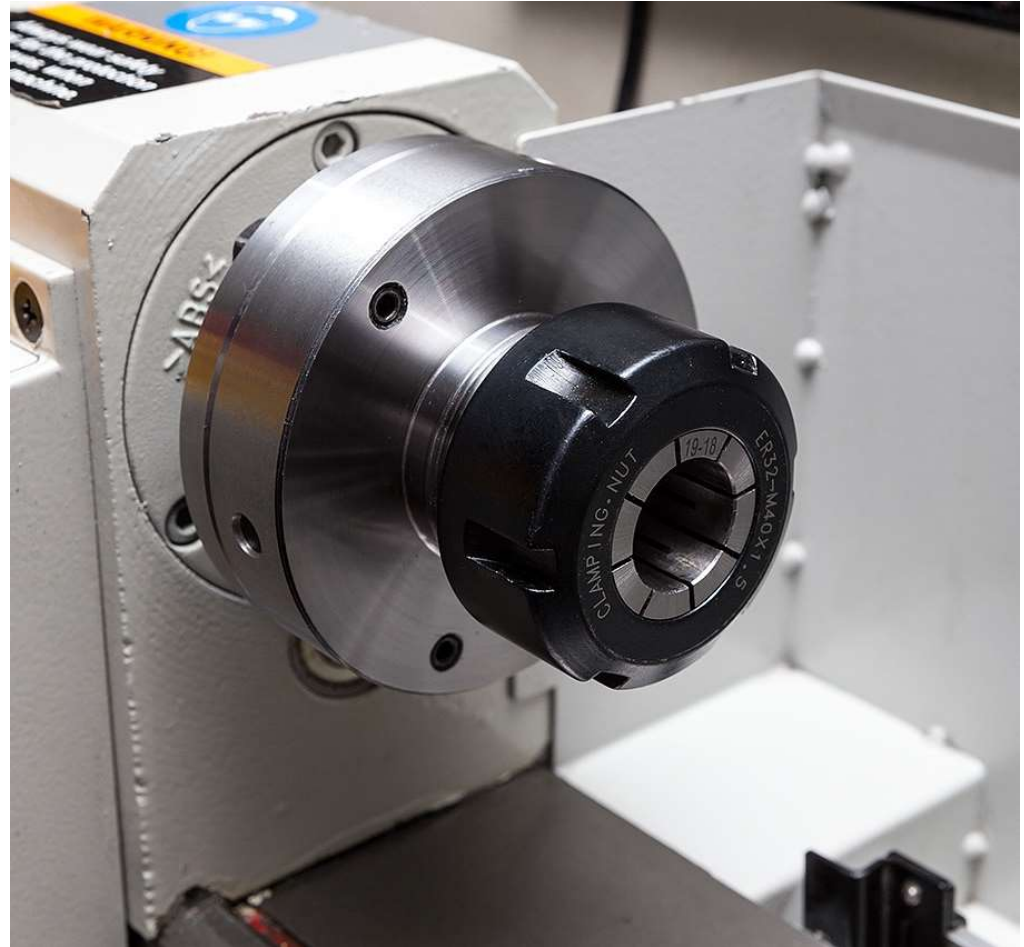
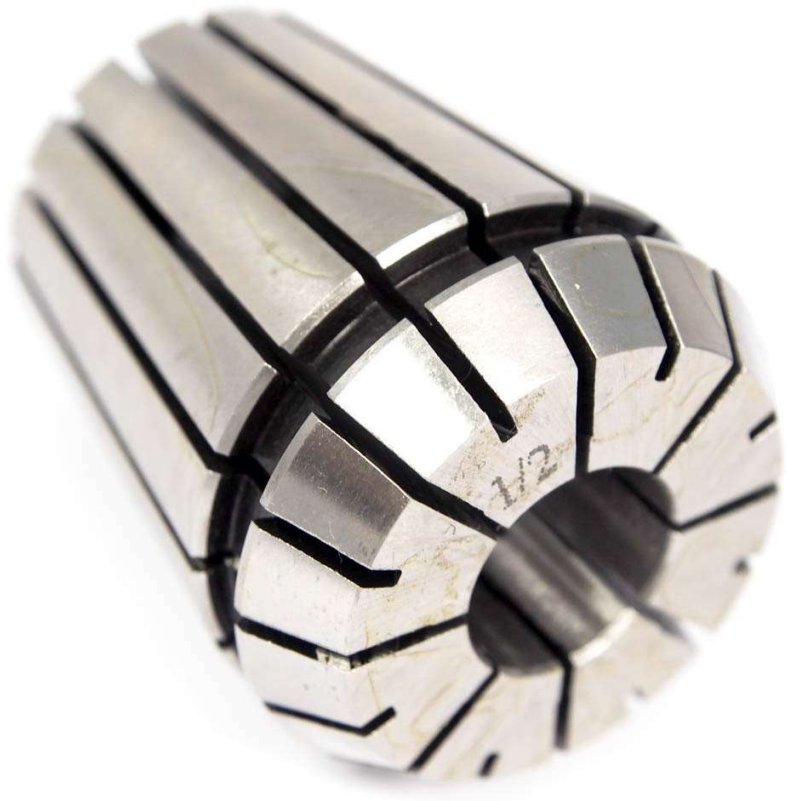
Collets

A side quest

Collets, 5C

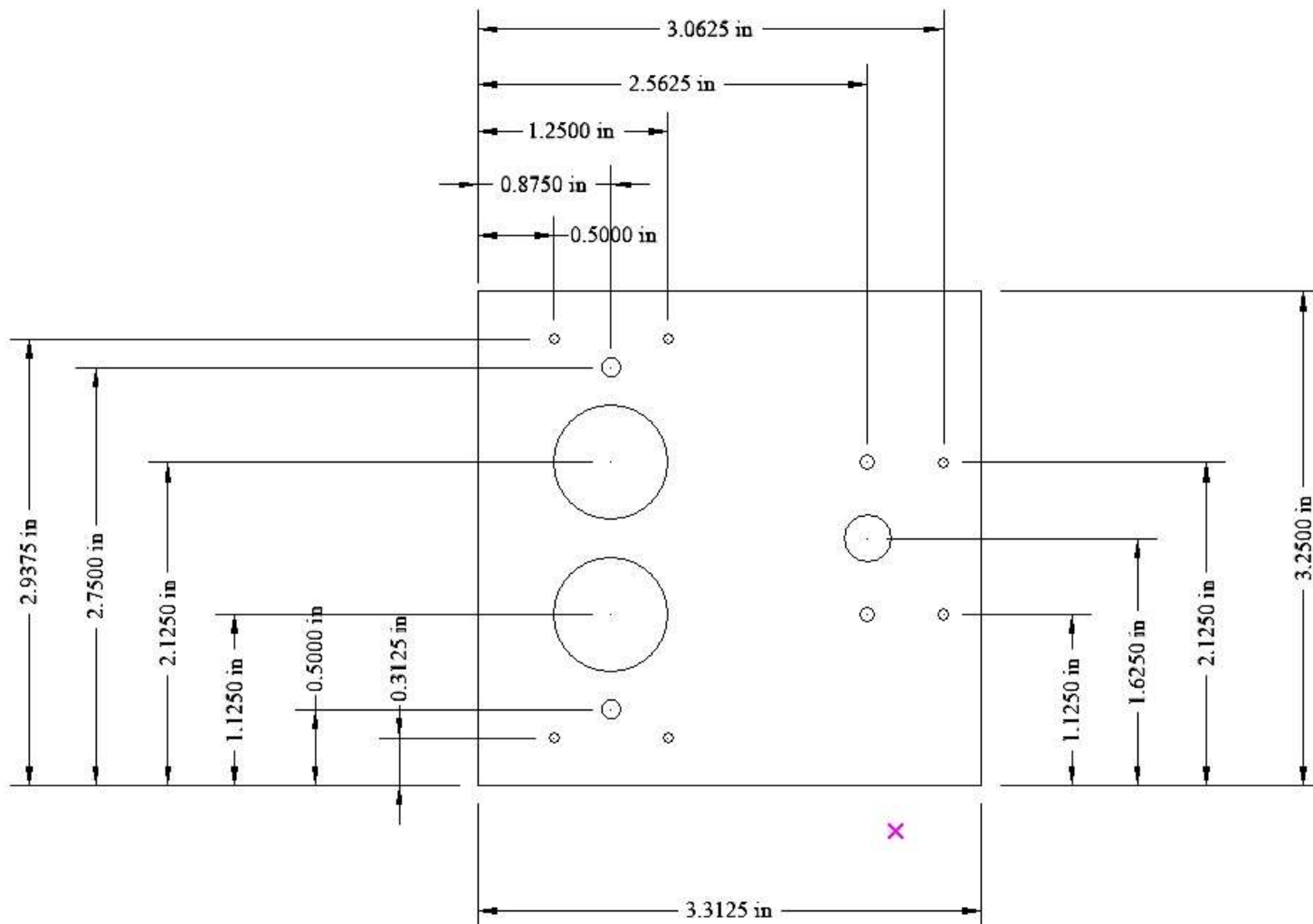


Collets, ER



Foot Plate

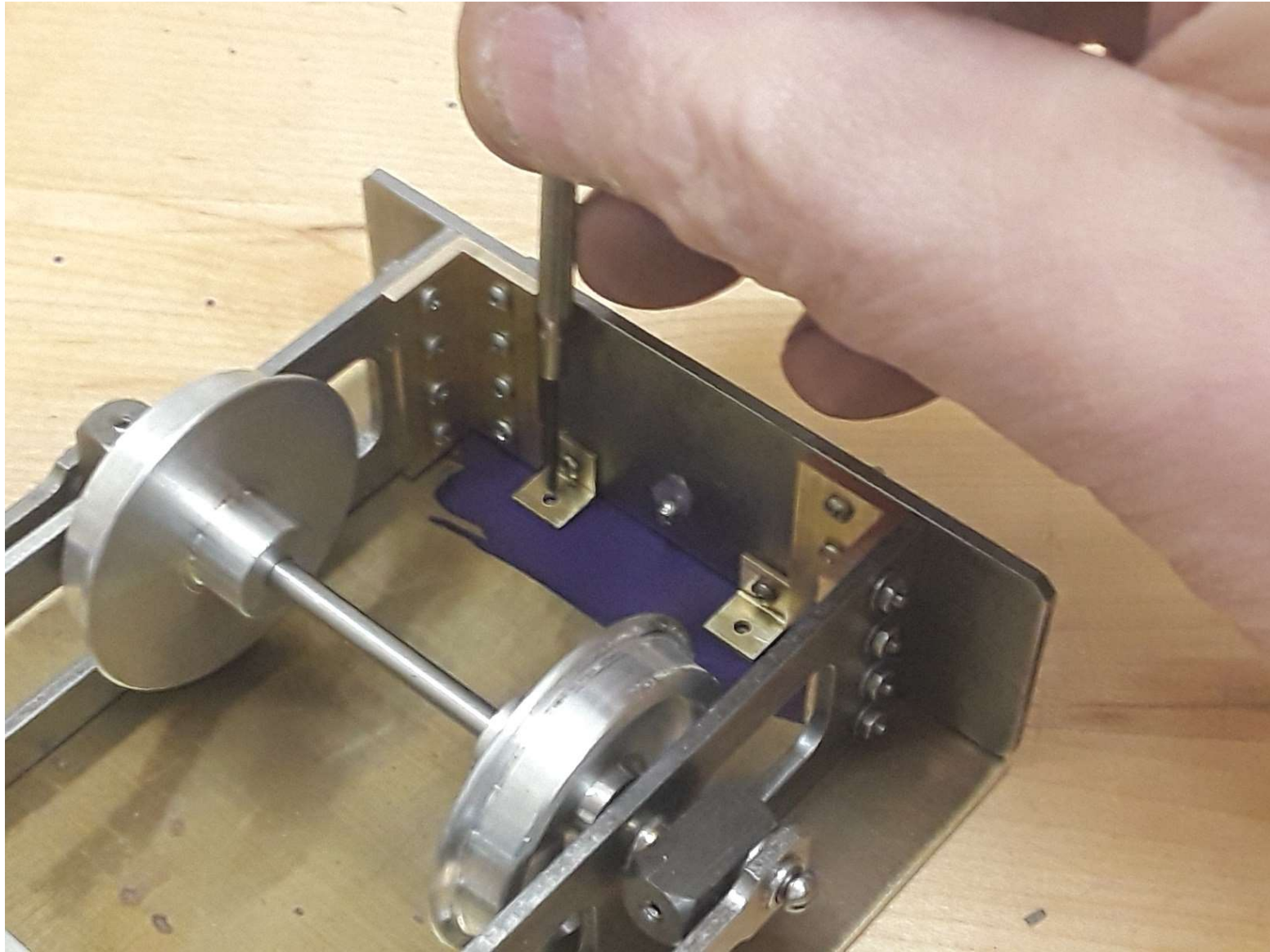
0.031" Brass or Steel



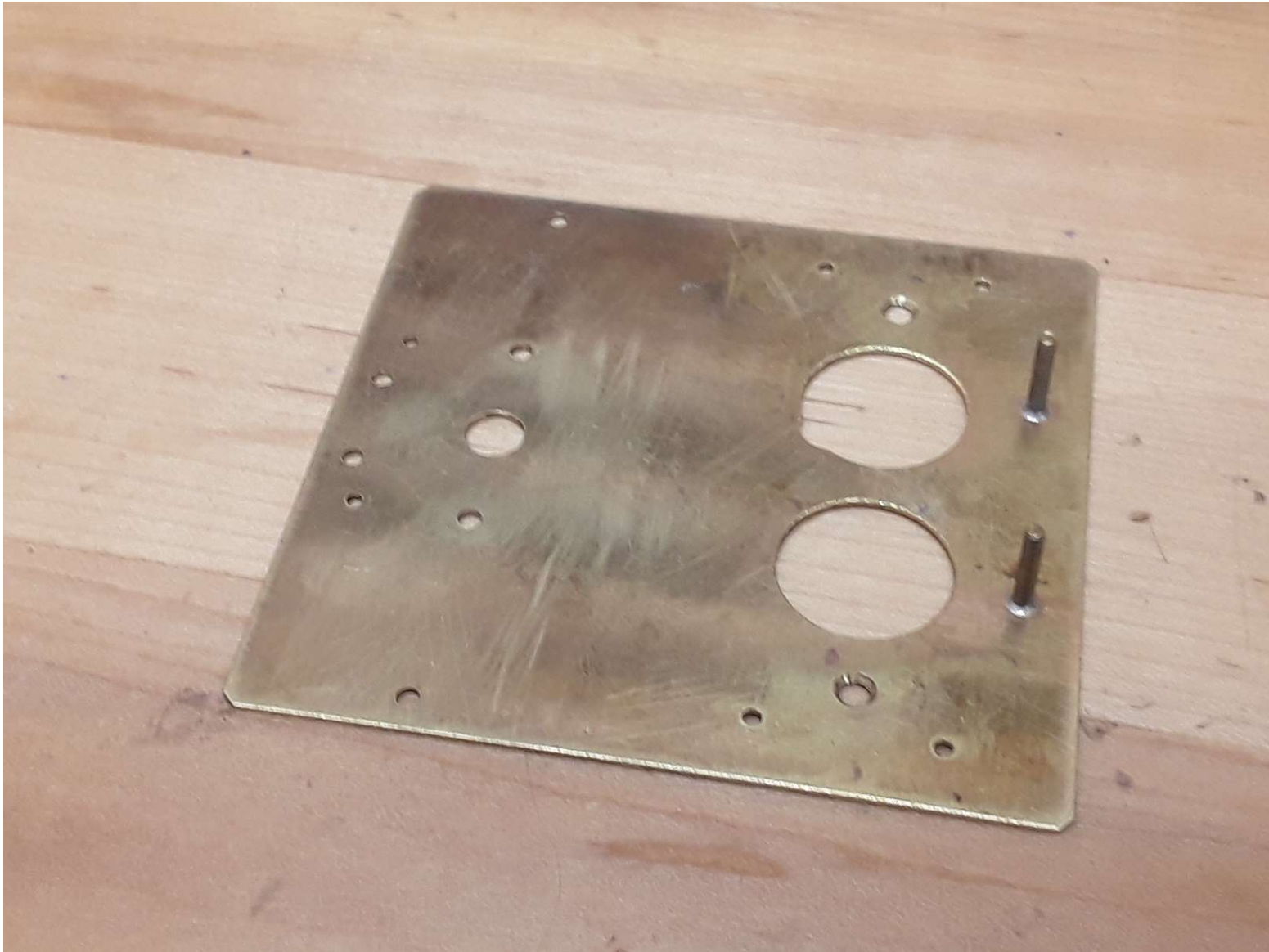
Drill Schedule

- 2 - 0.750 dia
- 1 - 0.3125 dia
- 2 - #4 clearance
- 2 - #2 clearance
- 6 - #0 clearance

Foot Plate

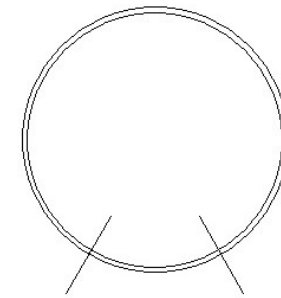
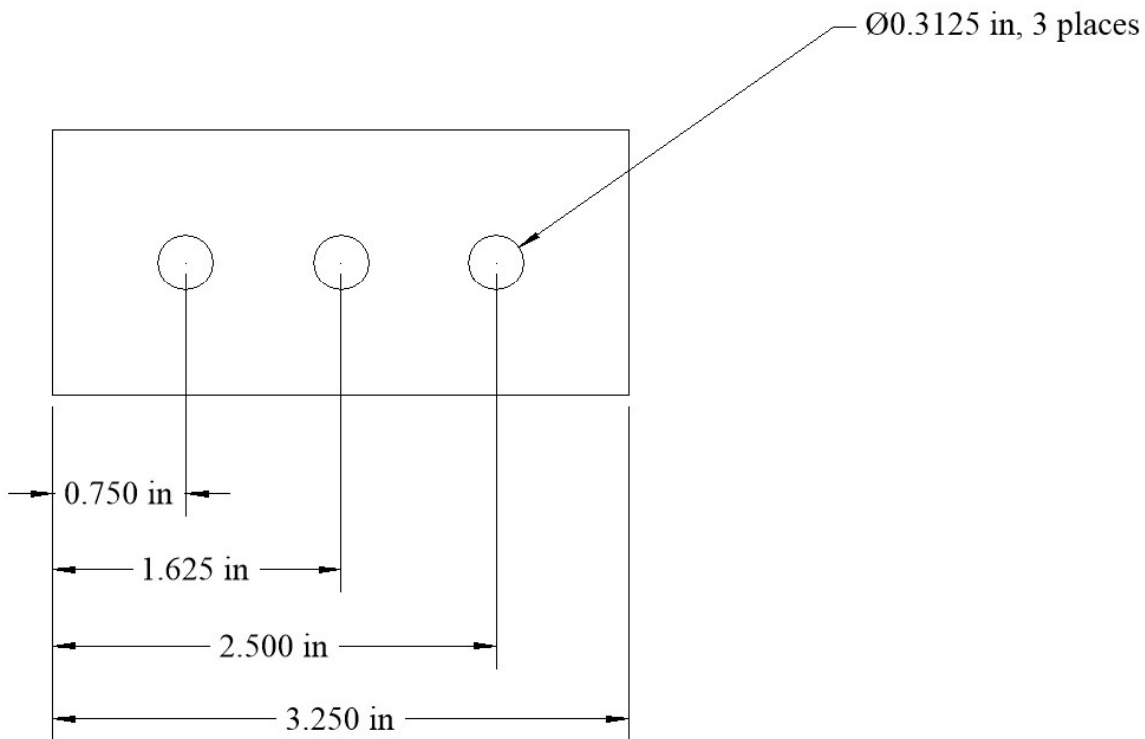


Foot Plate



Boiler Shell

1.5" OD, 0.031" Wall Copper tube

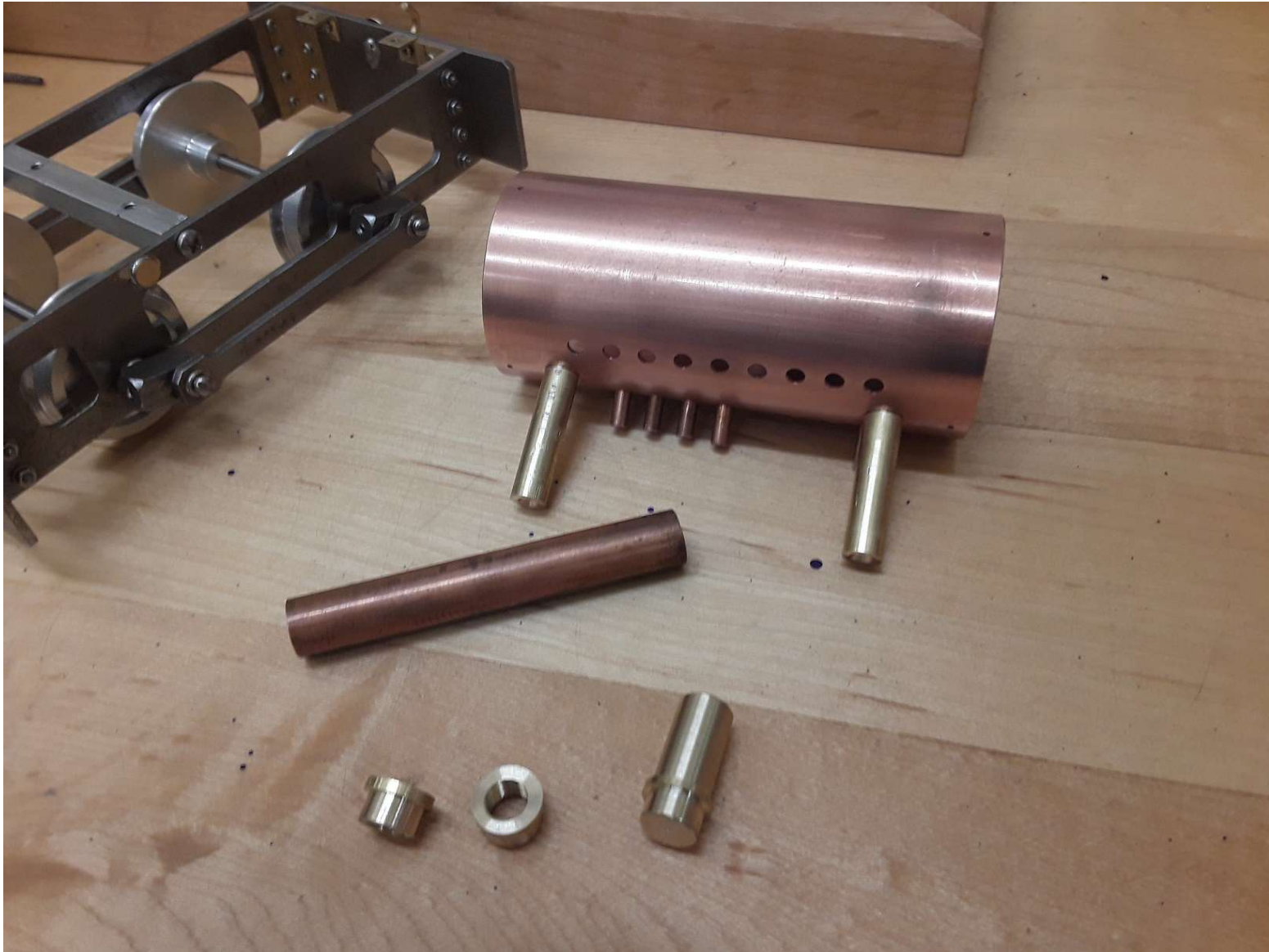


Along bottom of boiler shell, solder 2 rows of 9 "porcupine" from 1/8" dia copper rods, 1/2" long, spaced 1/4" apart

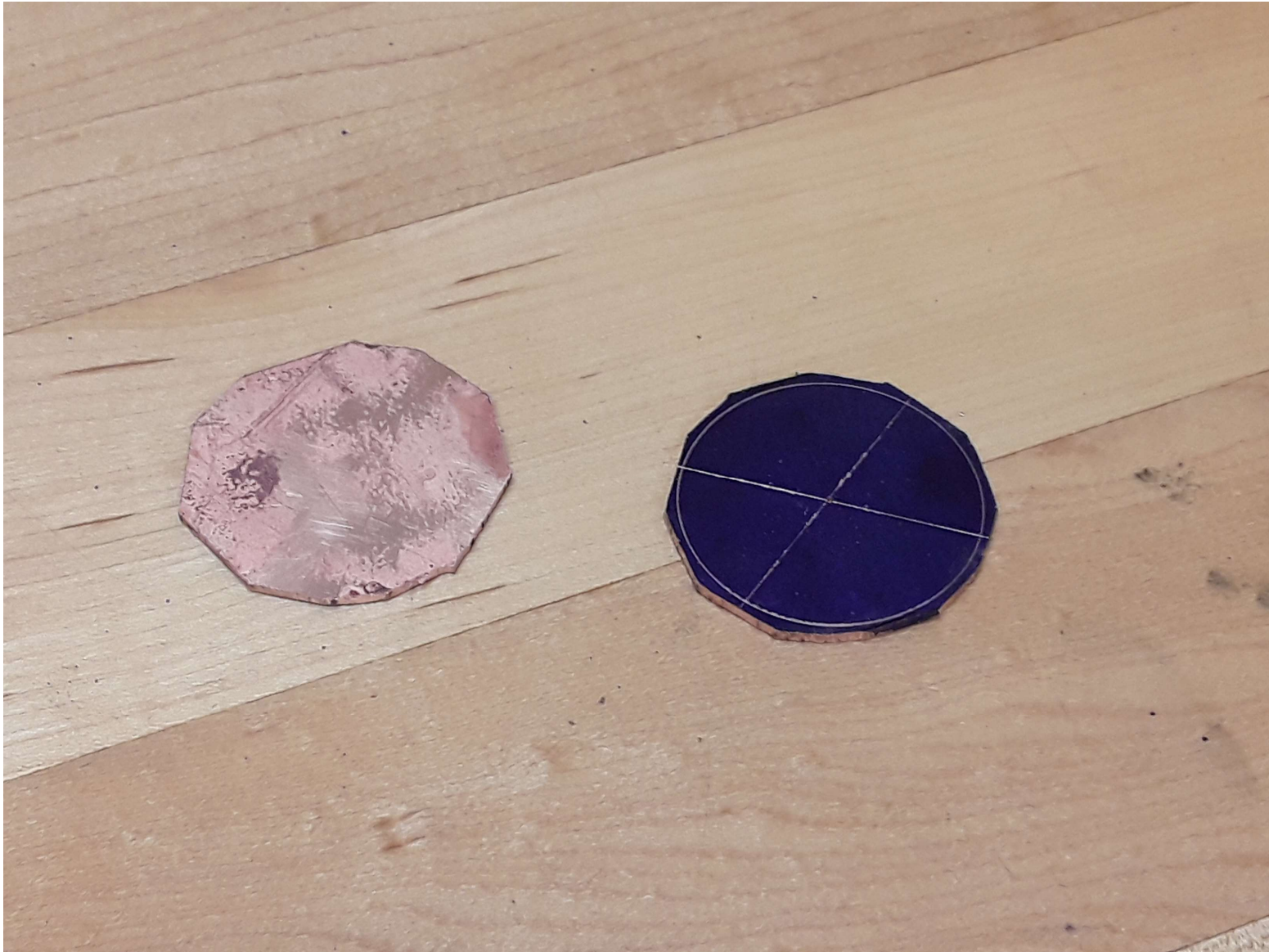
Boiler Shell



Boiler Bushings



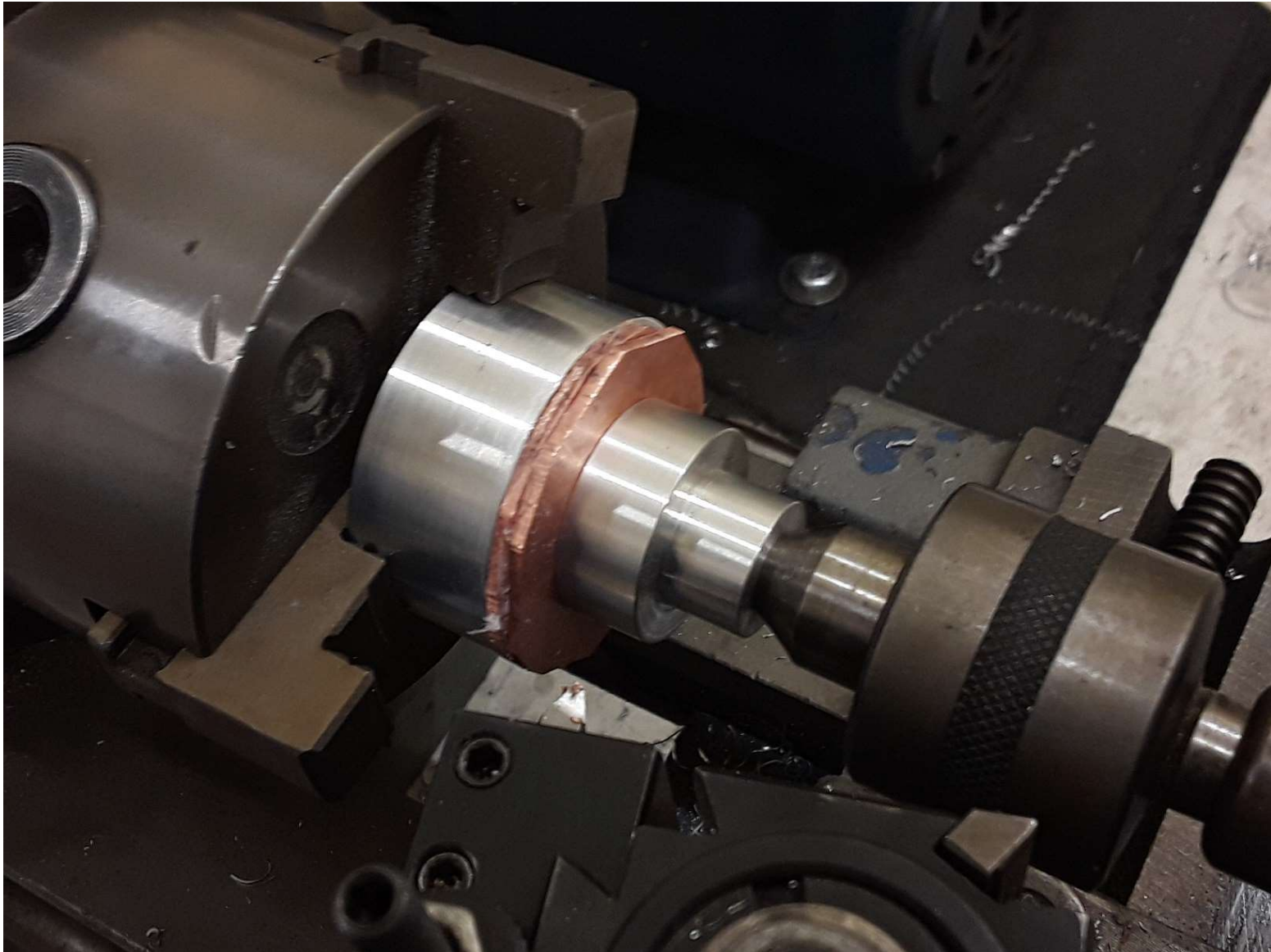
Boiler Ends



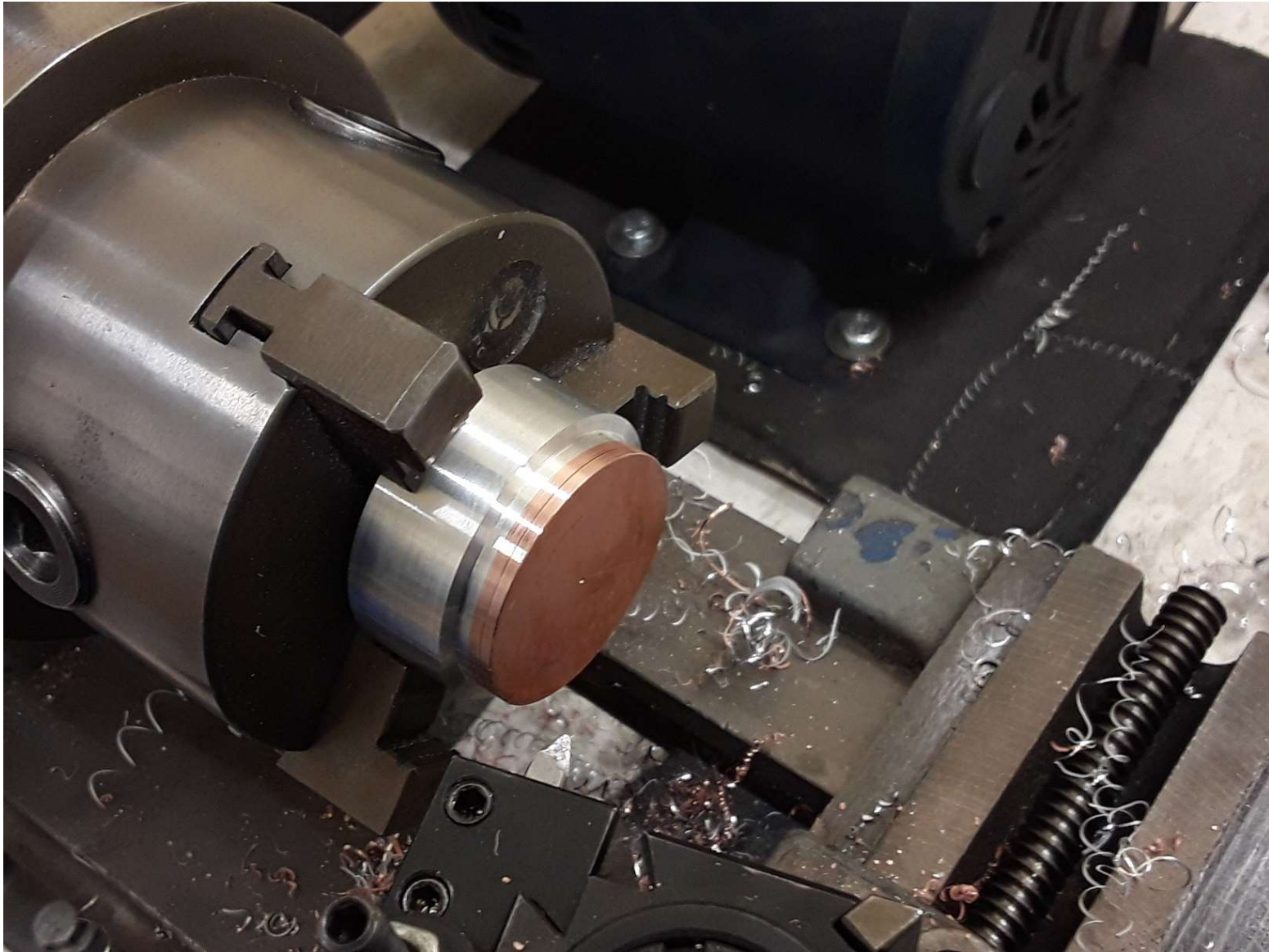
Boiler Ends



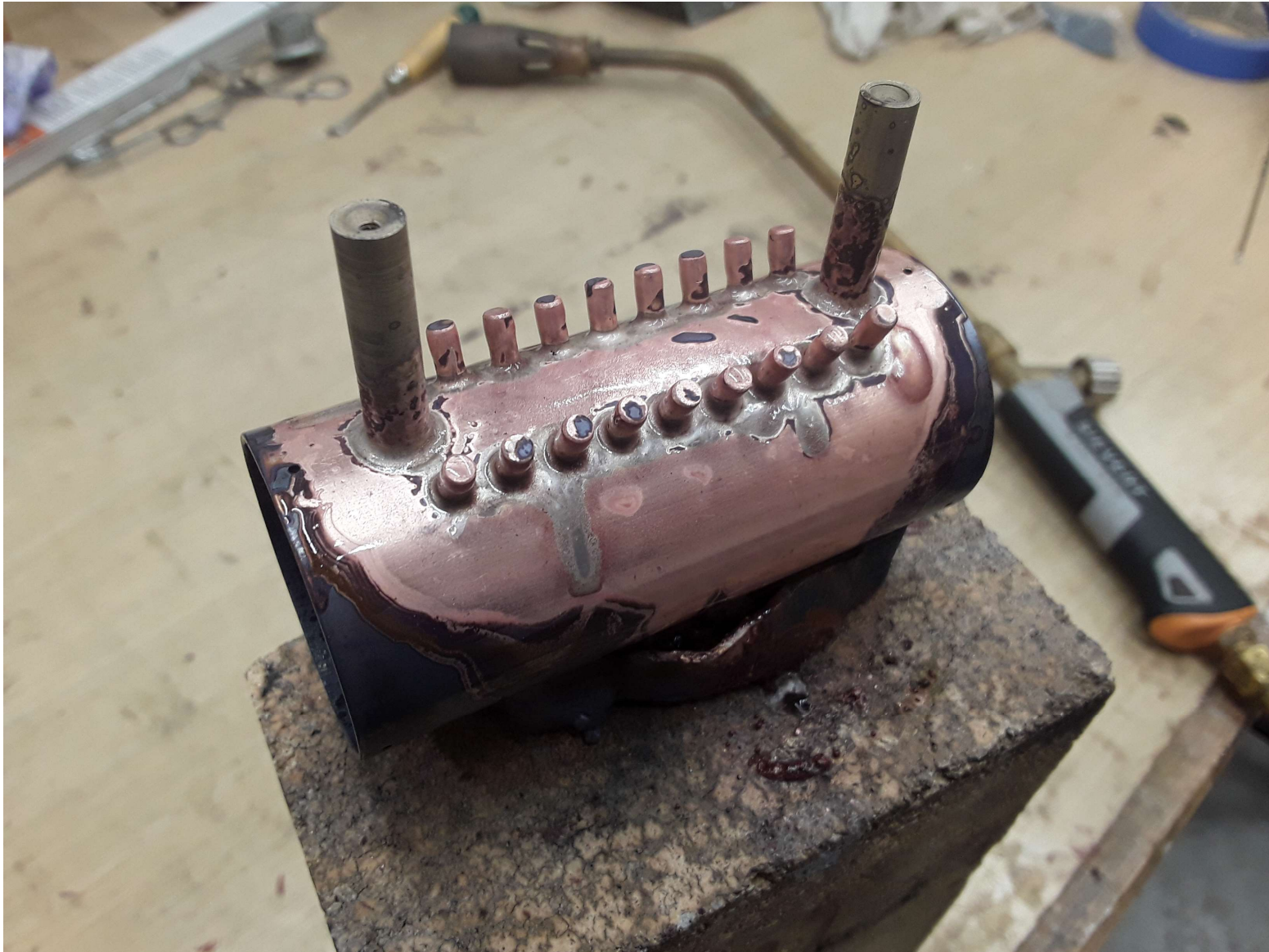
Boiler Ends



Boiler Ends



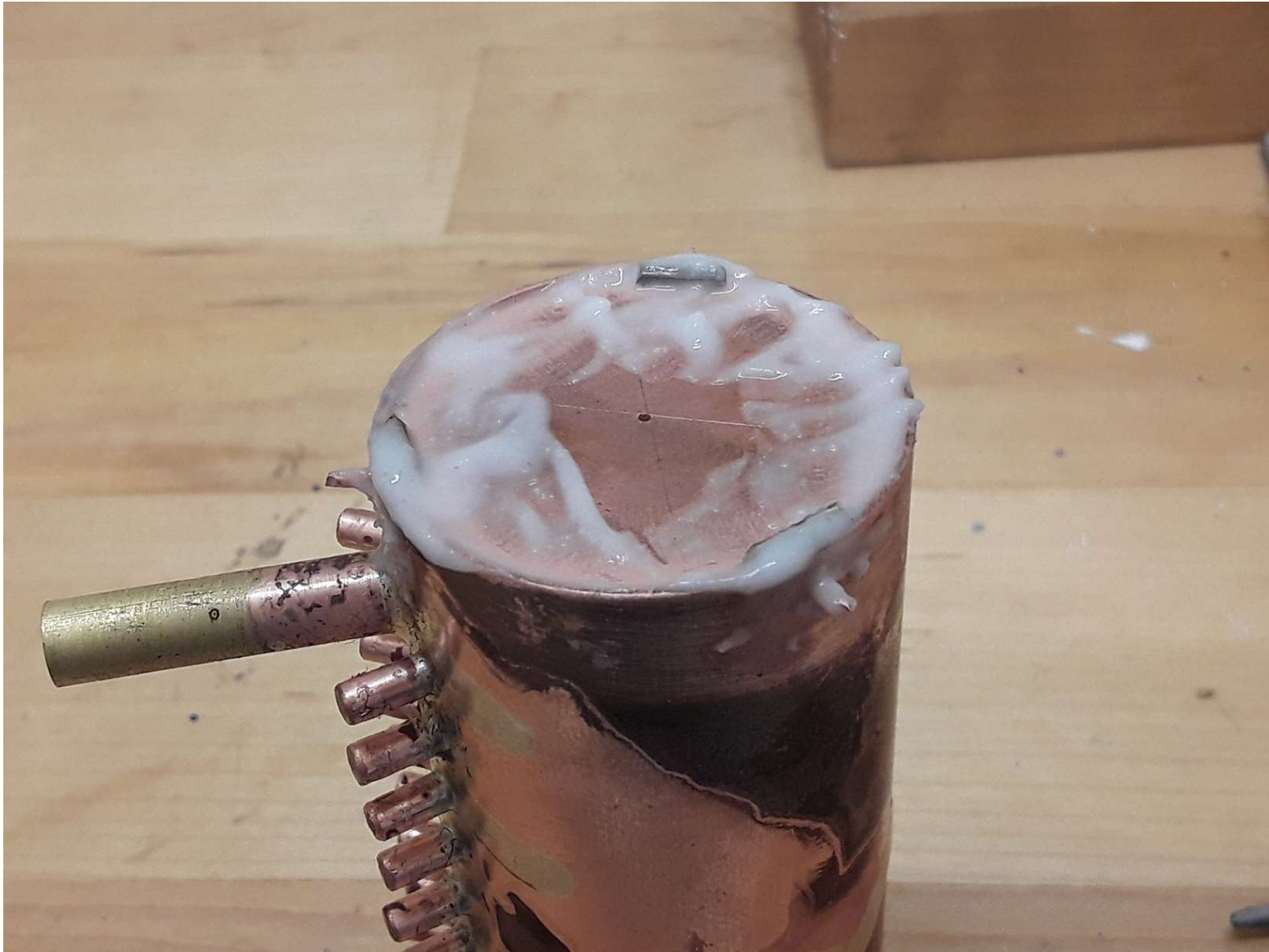
Boiler Soldering



Boiler Soldering



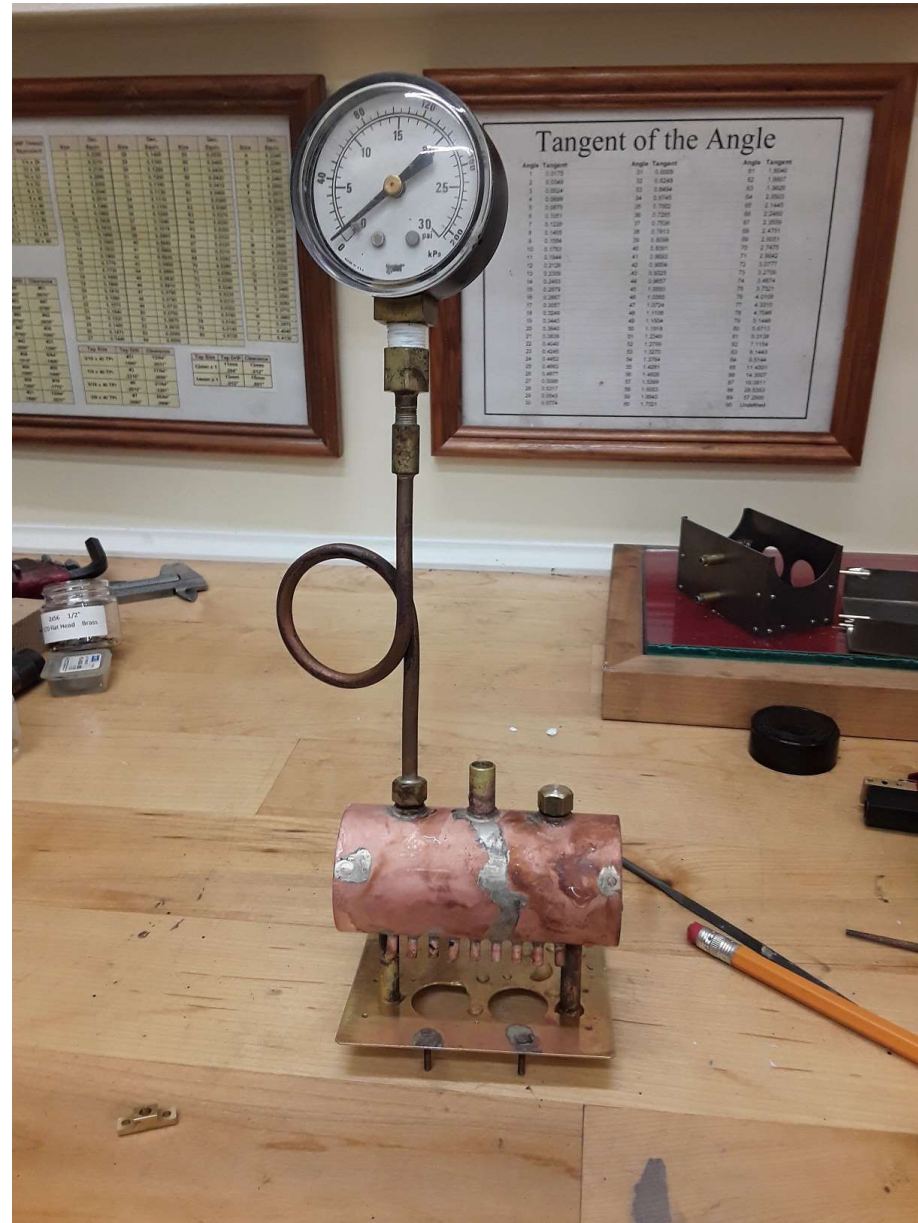
Boiler Soldering



Boiler Test



Boiler Test



Boiler Test



Fire Box



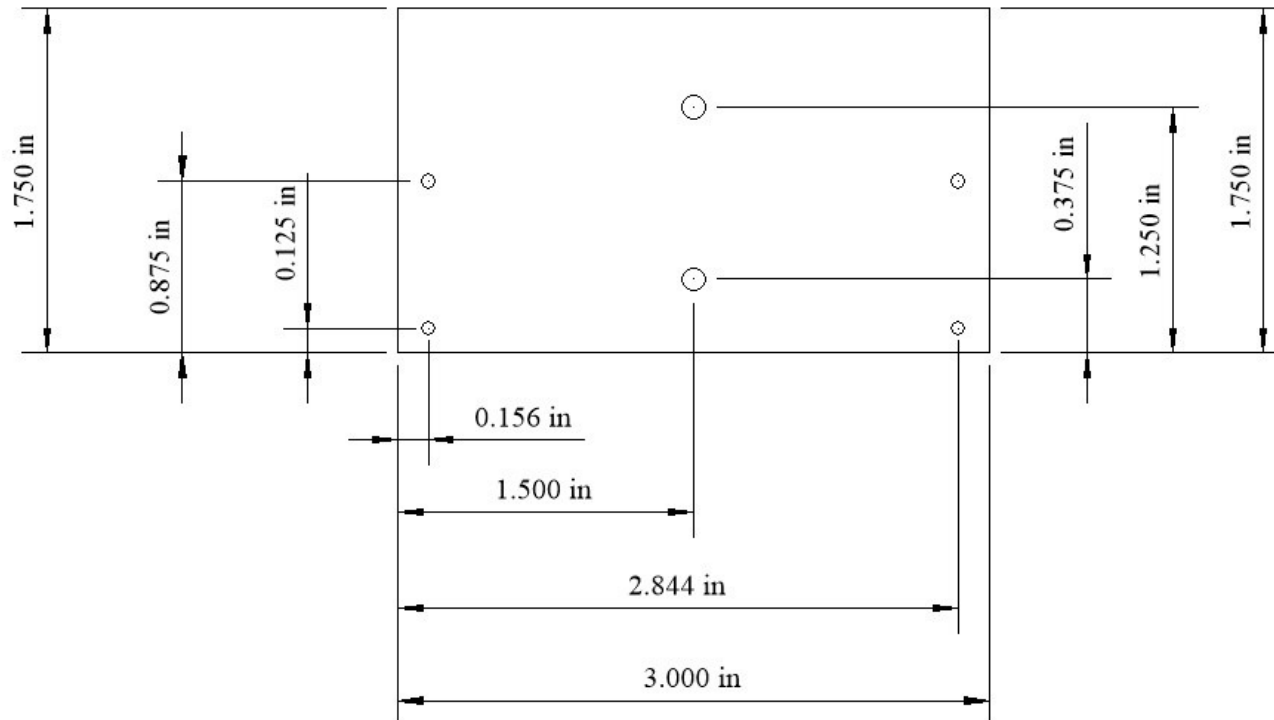
Fire Box

0.025" Brass or Steel

Drill Schedule

2 - #4 clearance

4 - #0 clearance



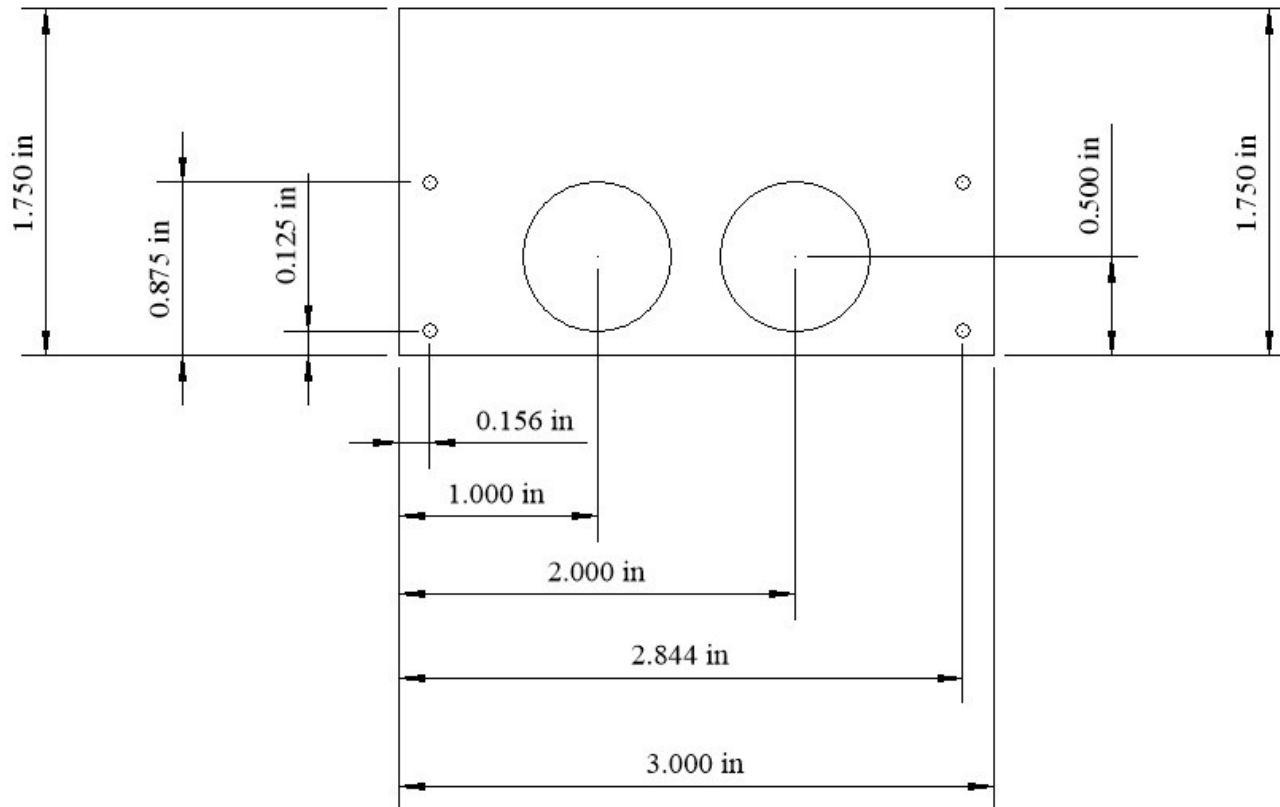
Fire Box

0.025" Brass or Steel

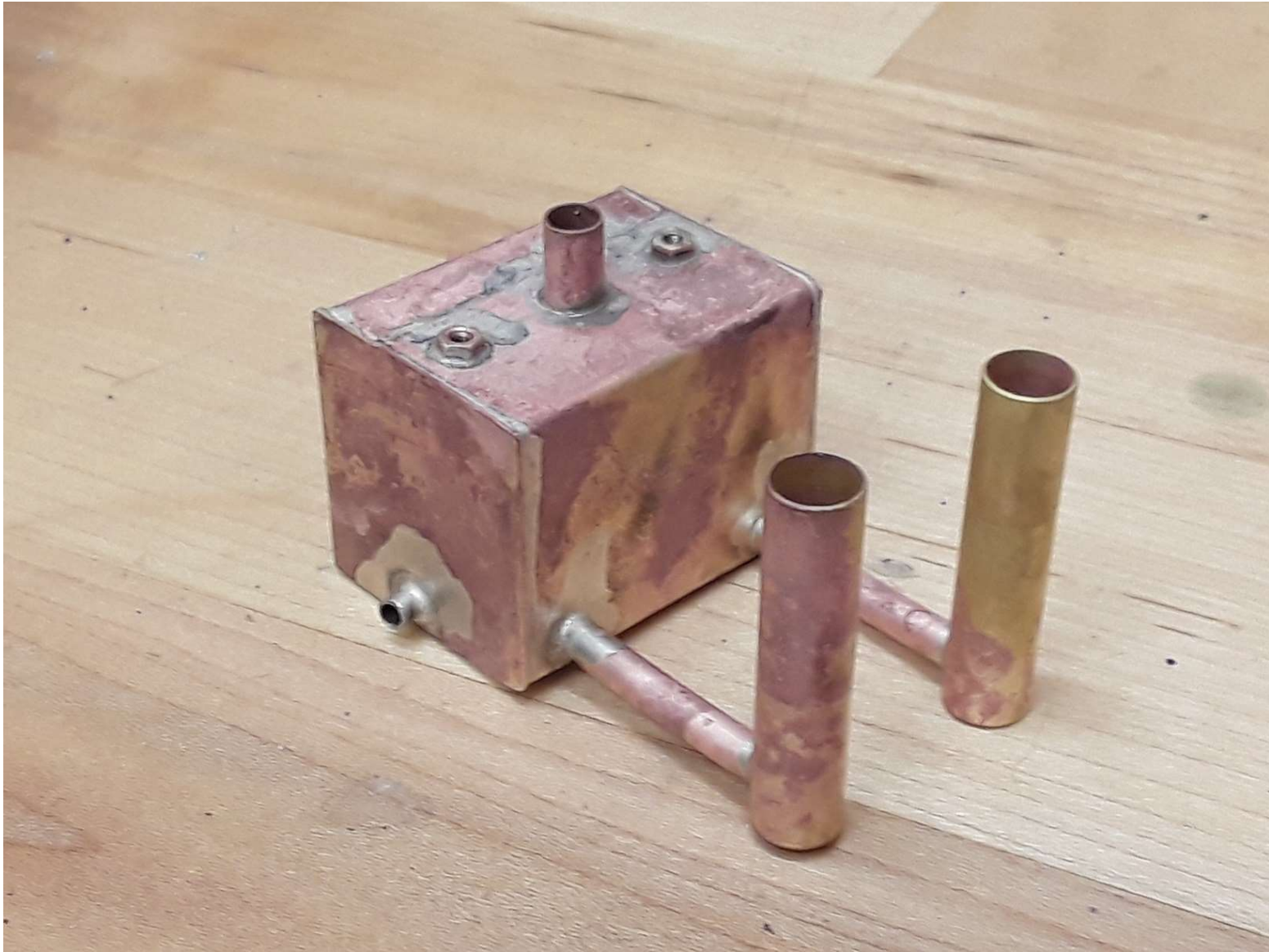
Drill Schedule

2 - 0.750 dia

4 - #0 clearance

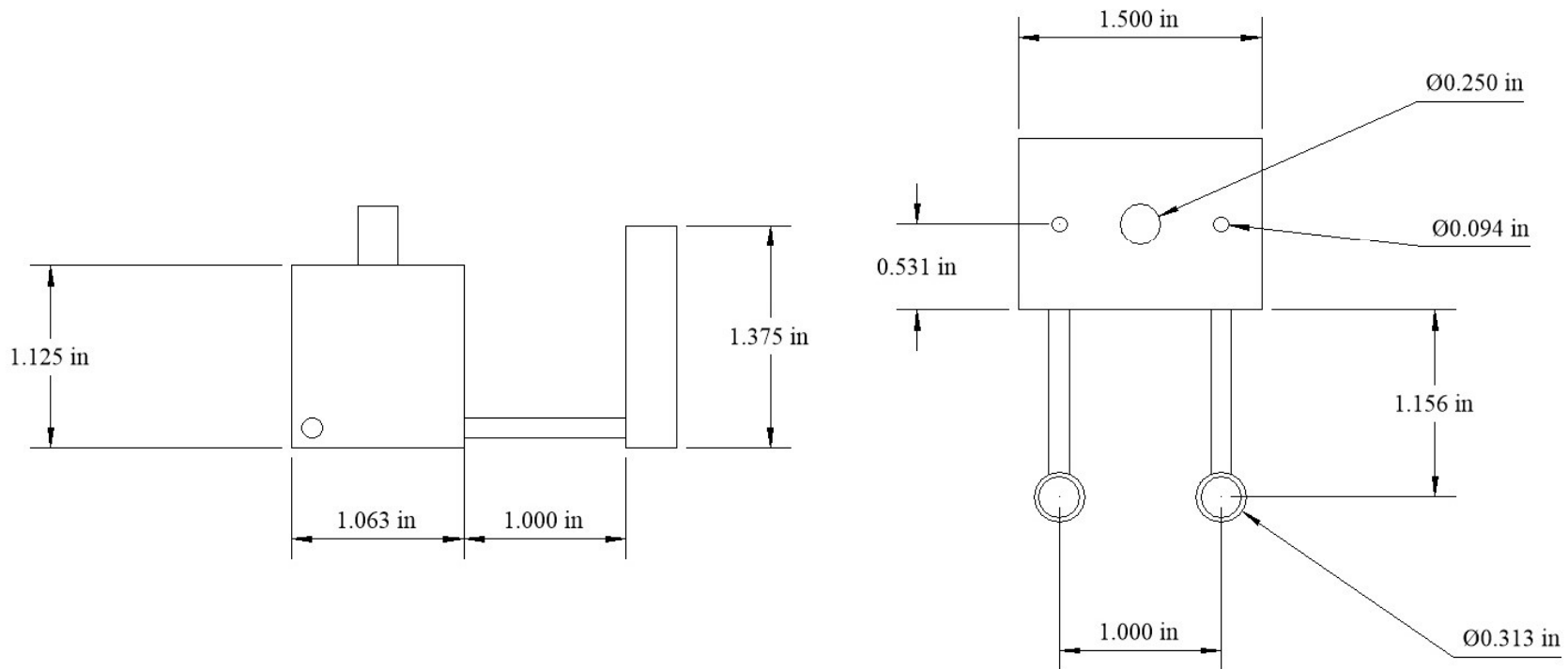


Fuel Tank

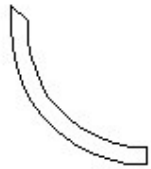


Fuel Tank

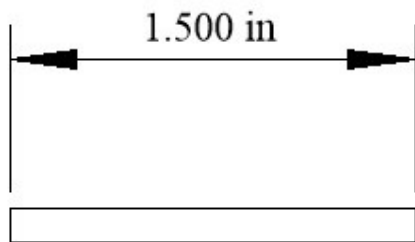
Fuel Tank, 0.025" thick Brass and silver solder fabrication



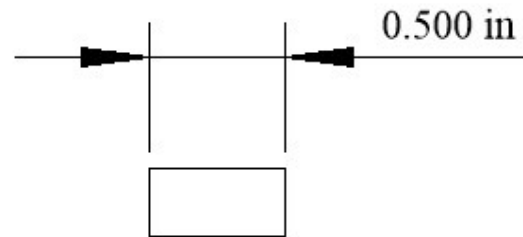
Fuel Tank Parts, Brass and Silver Solder Fabrication



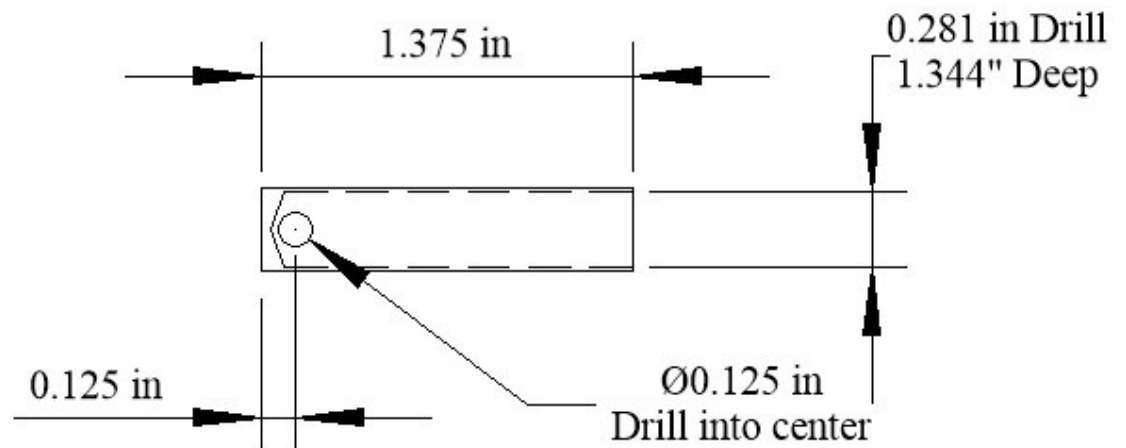
Overflow tube
1/8 copper tube
bend and angle top to fit



Fuel Line, 2 each
1/8" dia Brass Tube



Filler tube
1/4" dia brass tube



Burner Pot, 2 each
.3125" dia Brass

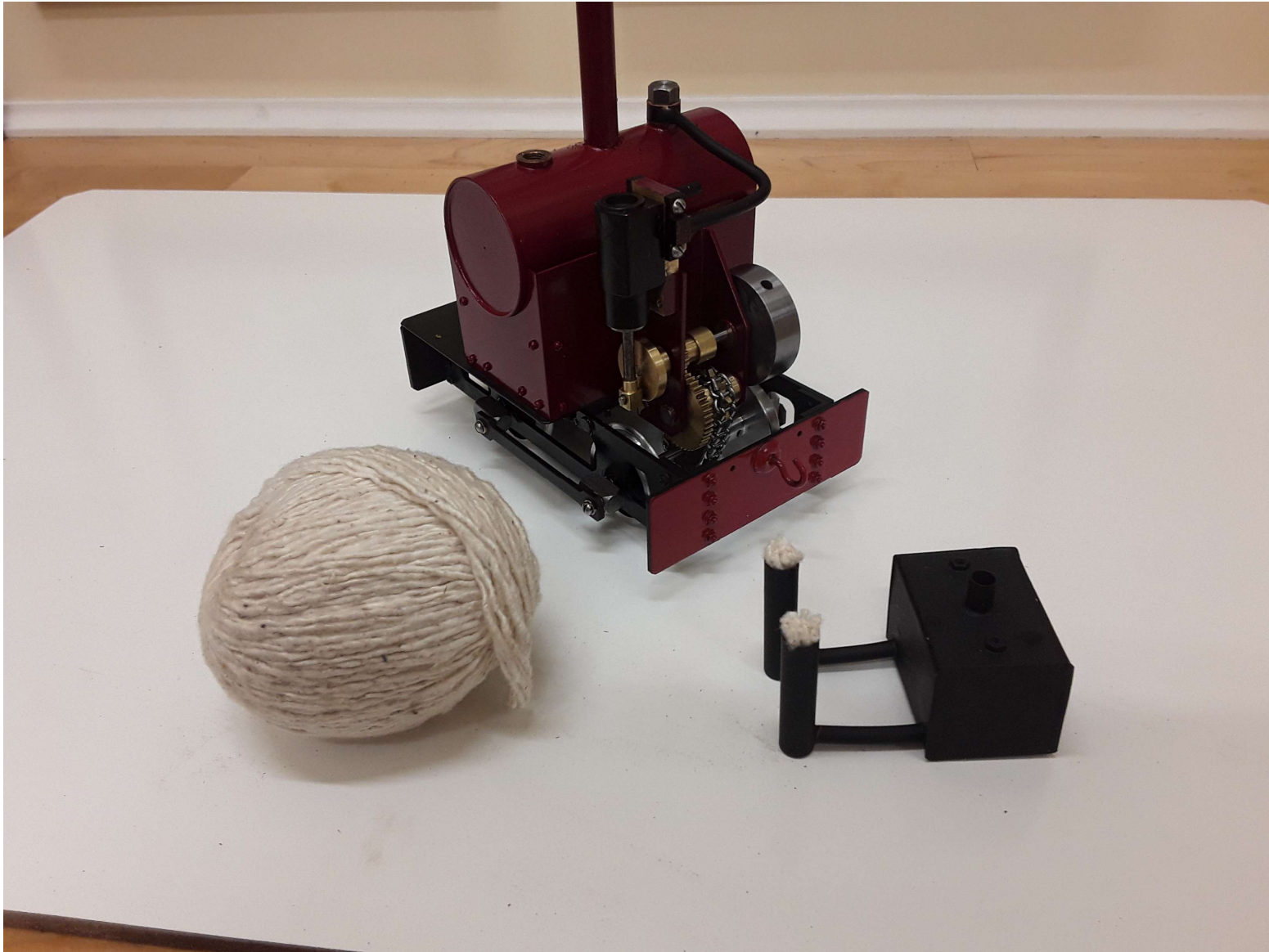
Fuel Tank



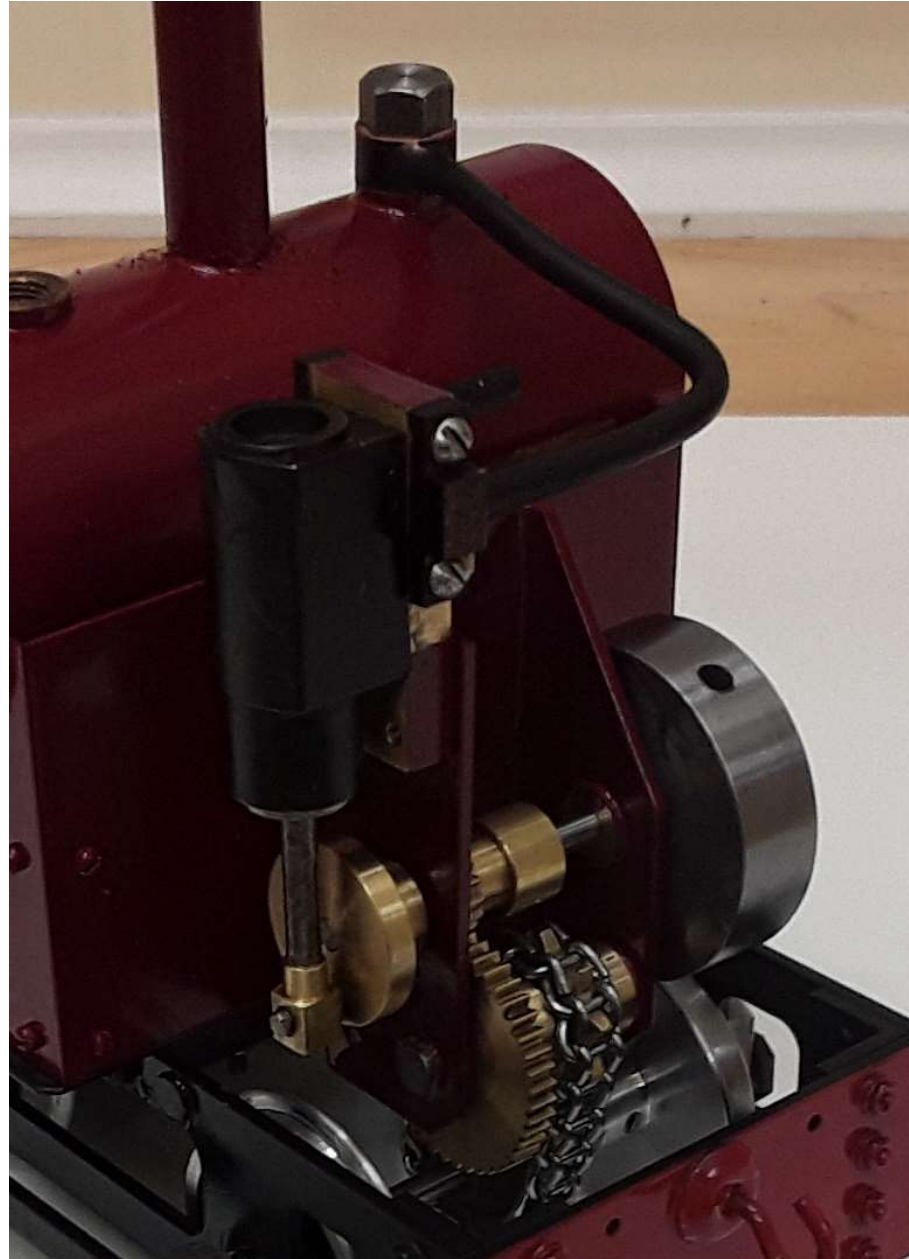
Fuel Tank



Fuel Tank

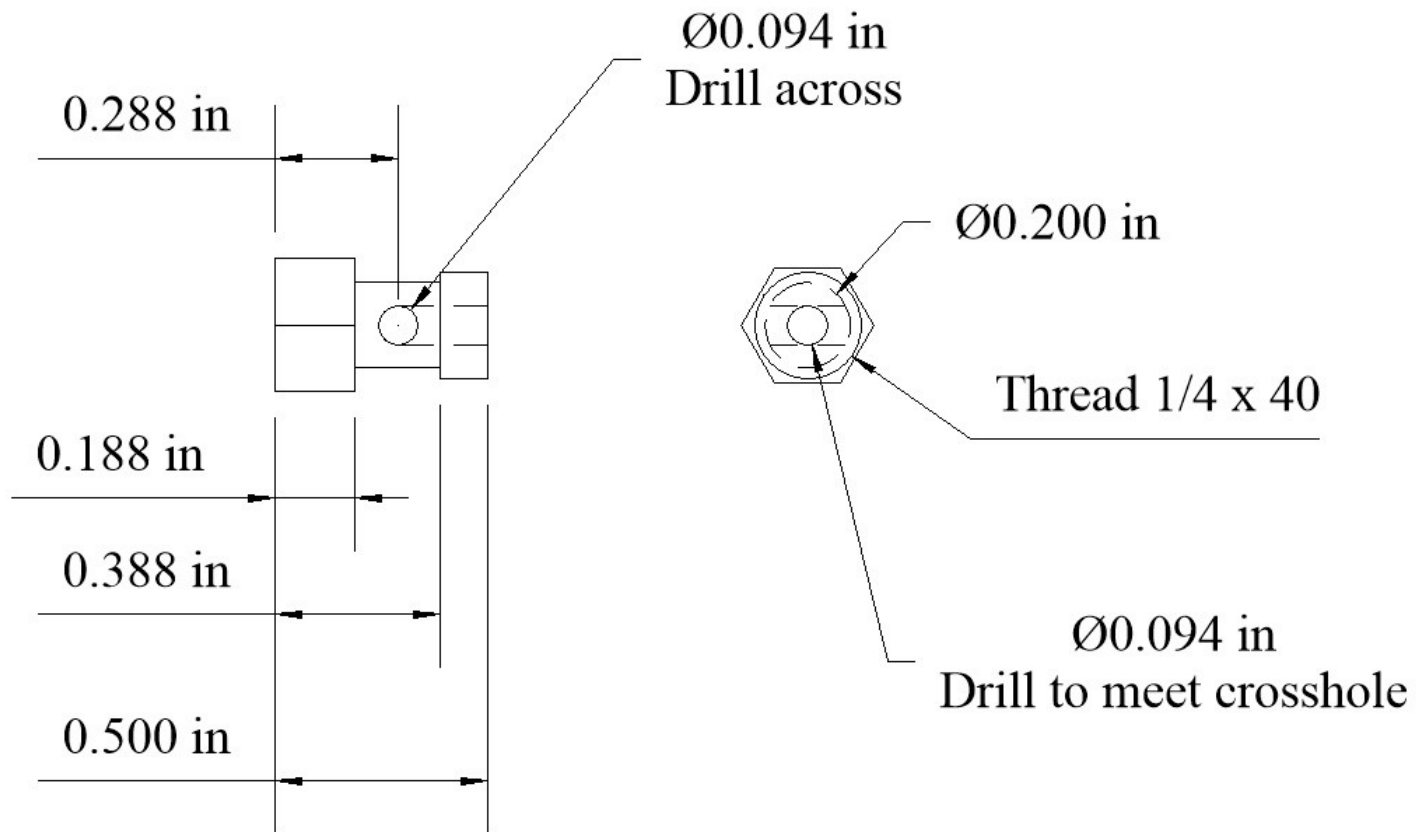


Plumbing



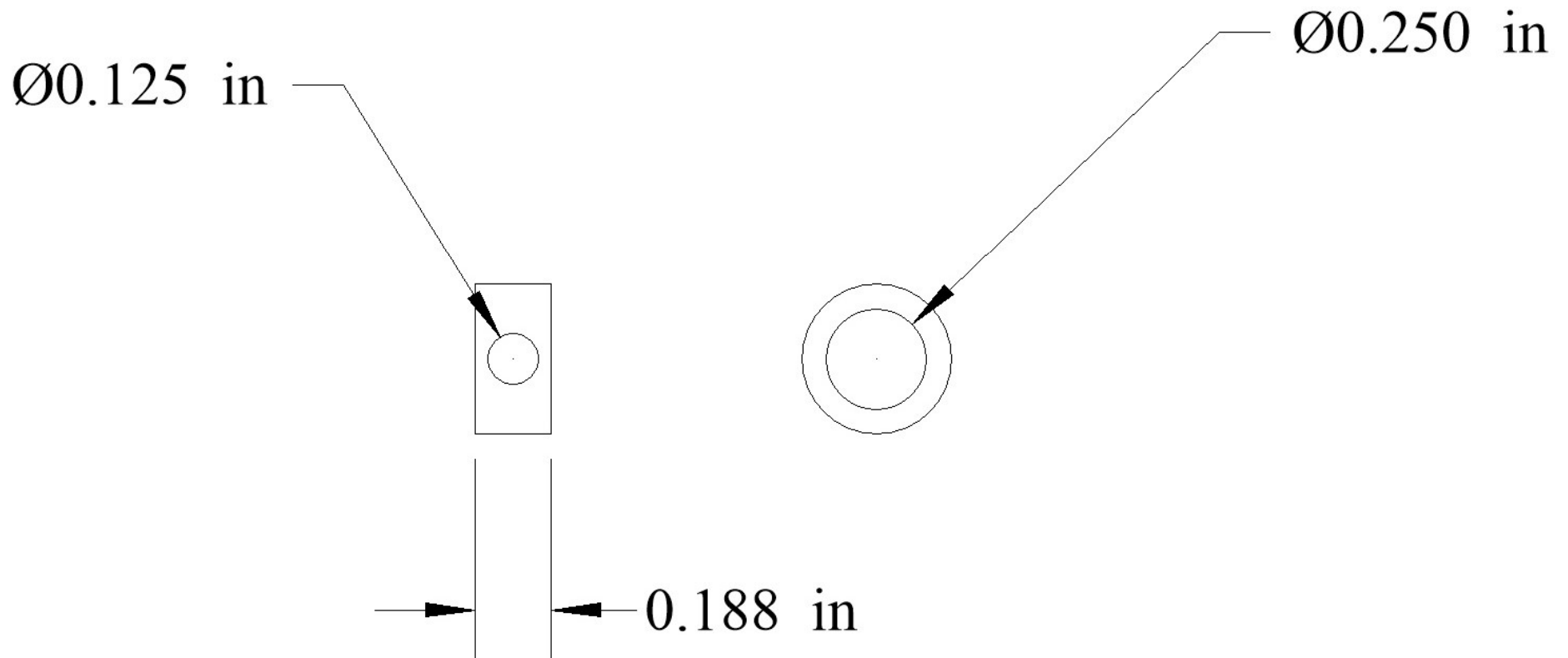
Plumbing

Banjo Bolt, 5/16" Hex Brass or Stainless



Plumbing

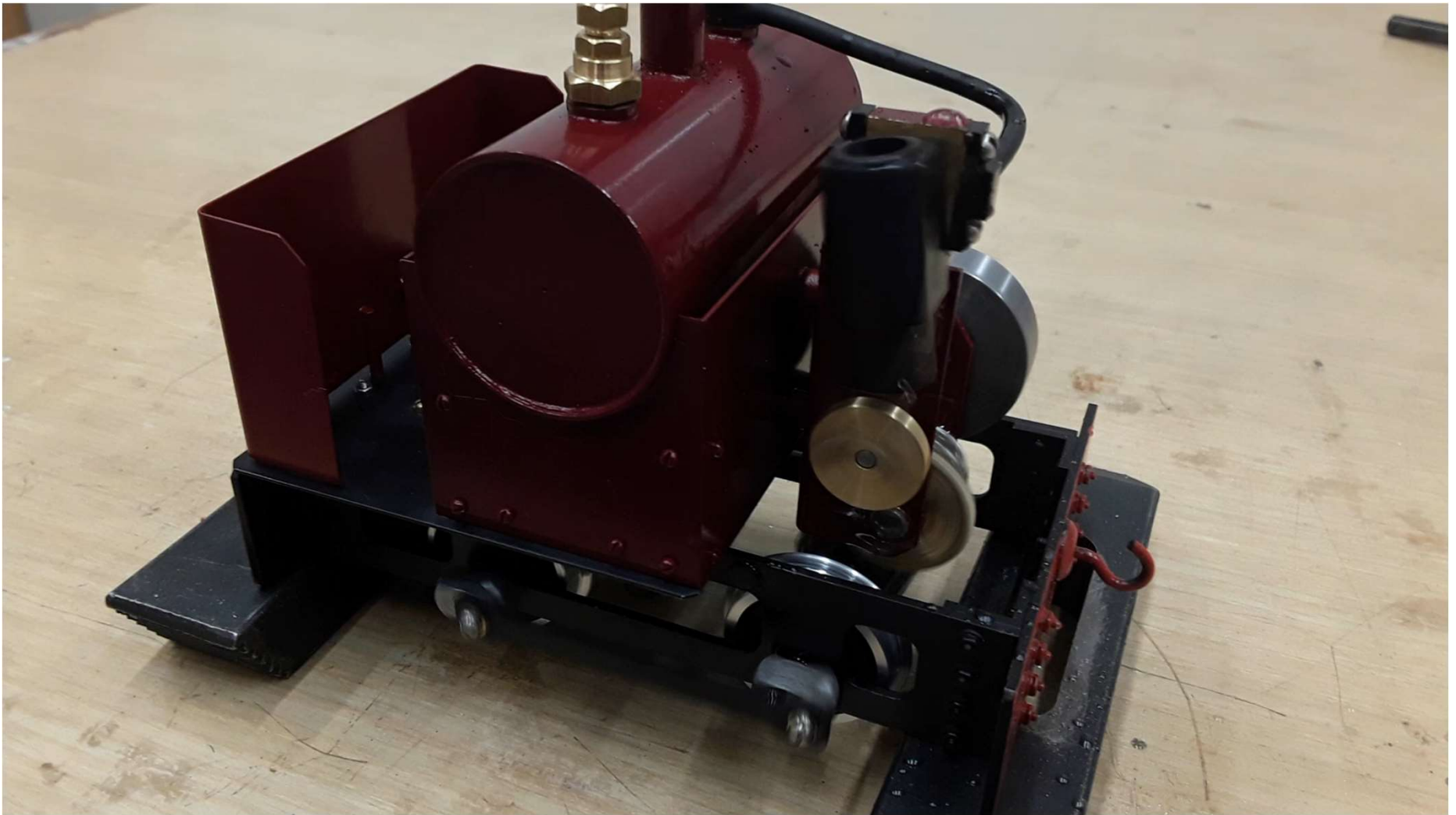
Banjo Fitting, 3/8" dia Brass



Plumbing



Bench Test on Steam



Questions?