

TIP 79 — Using the Threading Attachment to Wind Springs/Tom Boyer

Retired Craftsmanship Museum master machinist Tom Boyer sent in an email describing how he learned to wind springs using the threading attachment on a Sherline lathe. He first found this method in [Model Engine Builder](#) magazine issue #11 (Mar/Apr 07). He made a custom brass tool based on author Dwight Giles' design in the article. He feeds music wire through a hole in the tool and the nut is tightened to provide tension so wire wraps tightly around the mandrel. The V-notch supports the mandrel as the spring is wound and keeps it from deflecting due to the tension on the wire. Spacing on the rings of wire is determined by the gear combination used on the threading attachment to move the tool post in relation to the rotation of the mandrel.

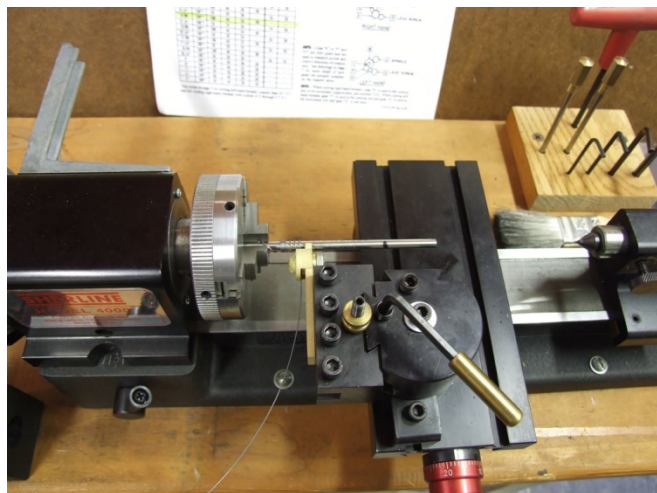


Figure 1— Overview of set up

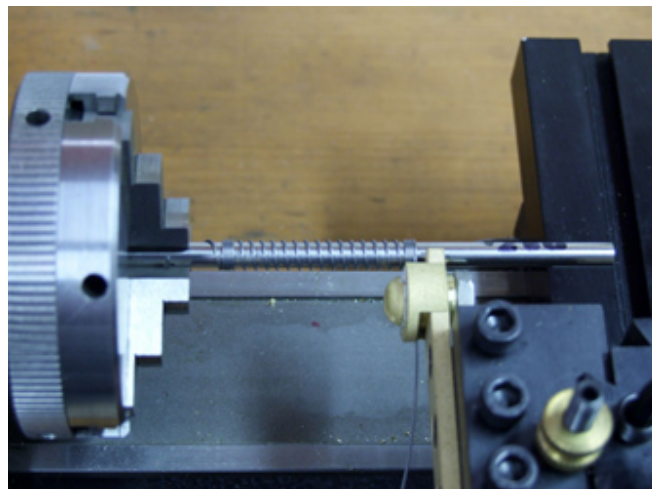


Figure 2—A close up view of the setup for winding springs. Instead of cutting threads, the threading attachment is used to determine the proper distance between the wraps of wire.

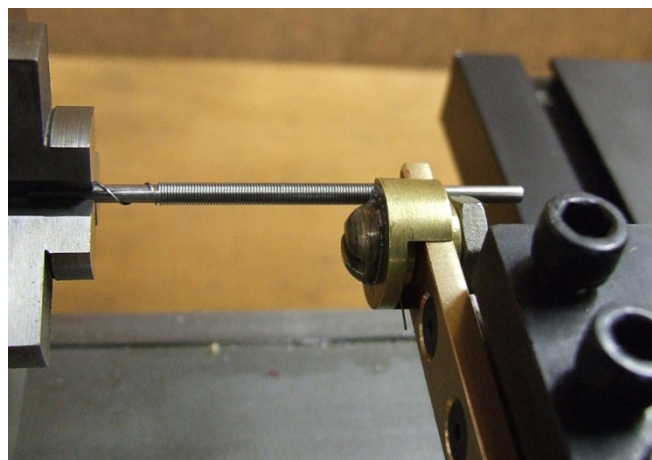


Figure 3 —The tool used to feed the wire onto the shaft and hold tension on it while doing so.

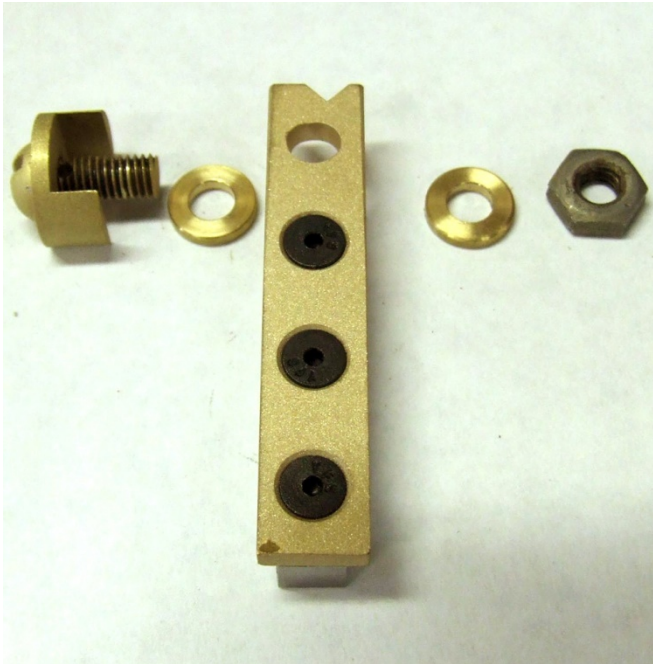


Figure 4



Figure 5



Figure 6

Figures 4-6 —Details of the wire feed tool that is held in the tool post.

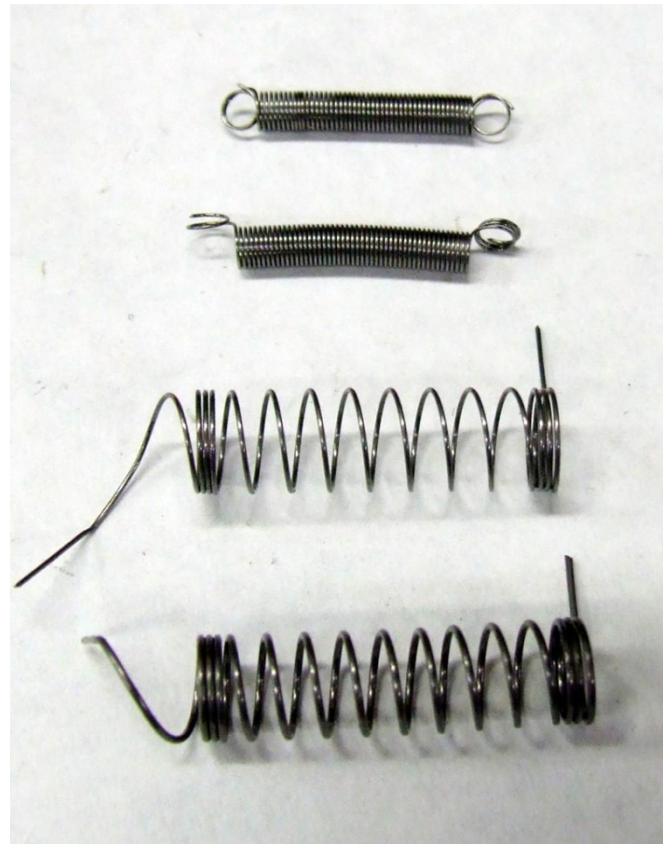


Figure 7 —Some of the various springs wound using Tom's method as learned from Dwight Giles' magazine article.