

Q. ---What is the Slender Turning Guide and How does it work?

A. ---The slender turning guide is for turning long and very slim pieces. It bolts either on the lathe bed (Fig. 1.) or directly onto the front of

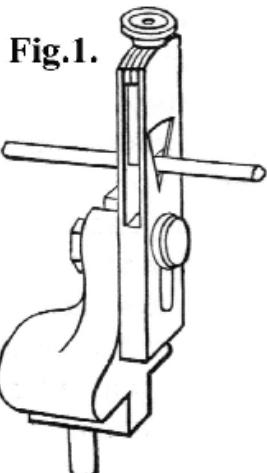


Fig.1.

the carriage of the tool-slide (Fig. 2.) and embraces (or hooks around) a slender rod of wood, plastic or ivory so it can be turned down to an incredibly small diameter. Take a fairly thick rod, say $\frac{1}{4}$ " or more diameter, held in the chuck and supported by the tailstock; then start turning at the right-hand end with the guide positioned on the un-cut part of the material just to the left of the cutter. With Fig.1. when the first cut is finished, re-position the guide towards the left to expose another short section of un-cut material then cut the next part immediately to the left of the cut section, and so on. The improved guide (made by J.H.Evans - see Fig. 2.) is attached to the carriage of the slide-rest; the guide just slides along the rod as the carriage is moved towards the headstock. It is similar in principle to a bar-feed lathe except the material is not fed through the headstock but it is fed through the guide as the slide-rest moves towards the headstock.

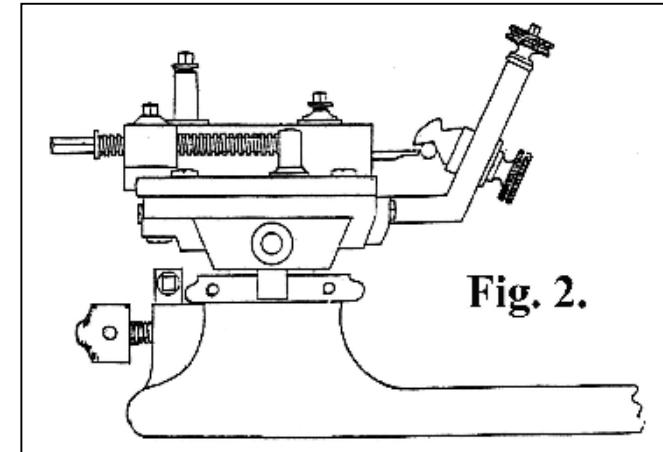


Fig. 2.

Long or short slim cylindrical sections may be interspersed with thicker sections and the cutting frames may be used to cut shapes and patterns or to drill holes. As the right-hand (already turned) part gets longer it may need intermediate supports; these may be made like fixed steadies except that, instead of having 3 or 4 bearing points, they are string frames, like 'cat's cradles' with 4 strings embracing the work, two vertically, one on each side, and two horizontally, one on top and one below, all stretched tight so the work is supported but able to rotate within the 4 strings. Several such frames may be needed to support a long piece of work.