

First the work is mounted on a threaded stub spindle. Then major and minor diameters are turned



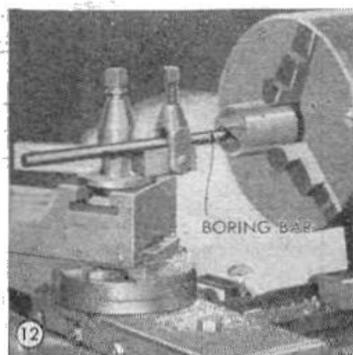
Set the gear train for 4½-lead and make the first cut using the thread dial, as is indicated by D in Table 2



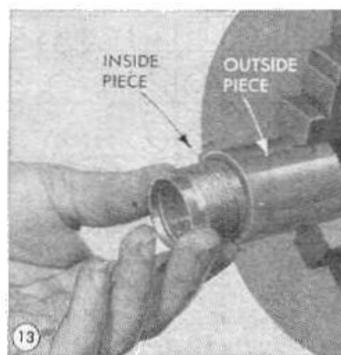
Engaging the dial as outlined produces four starts which are finally deepened to finish the threads



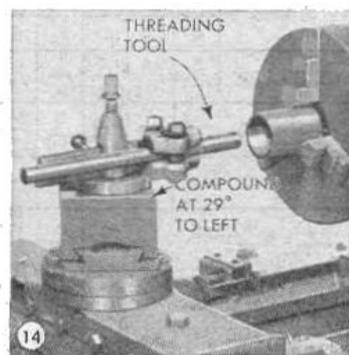
Note that the compound is in the 29-deg. position, swung to the right. Always use plenty of cutting oil



The outside piece is started by boring the hole to the required minor diameter, plus the proper clearance



The clearance allows minor diameter turned on the inside piece to fit loosely inside the bored hole



Cut internal thread same as external except compound is swung to left. Check frequently for size

lead you want, not the pitch. Proceed as for any single thread, but cut only to the depth of a 16-pitch thread. Table 3 shows this to be .047 in. or, if you use regular 29-deg. angle feed on the compound, the compound infeed is .054 in. Fig. 2 shows the first thread being cut. After cutting the first thread to full depth, back up the tailstock and fit the tail of the dog in a slot opposite to the one used for the first thread, Fig. 3. Back the compound to the original starting position

and cut the second thread just the same as the first. If you are using 29-deg. compound feed, the second thread will start along by the first thread, as shown in Fig. 4, and successive cuts will complete the thread. With the four slots of the faceplate you can cut a quad thread. If a triple or 3-start thread is desired, tap three equally spaced holes in the faceplate for studs and use a straight-tail dog.

Using thread dial: Most small lathes are