

14. Remove the taper bar and slide. Drill two 1/4" holes 1-1/4" deep in support bracket (A, fig. 9), and in bearing support (B). Install pins (furnished) flush with surface.

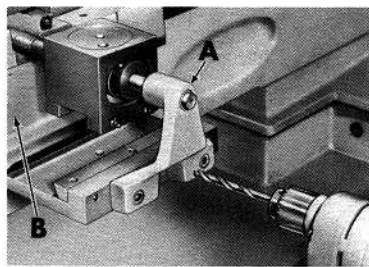


Figure 9

15. Replace the taper bar and slide, and rest bed clamp on top of bed way.

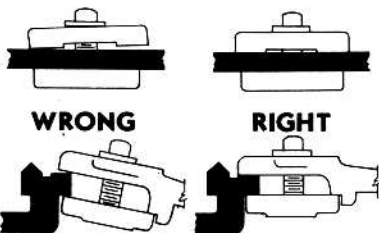


Figure 10

IMPORTANT—before clamping bracket to the bed, make sure bracket bears on bed evenly (refer to figure 10). If it doesn't fit evenly, check taper bar alignment to make sure it is parallel with the lathe bed -- refer to step 12. If clamp still doesn't bear evenly on bed, file clamp until it fits properly.

16. Tighten feed nut lock, and mount chip guard, furnished with taper attachment, to lathe cross slide.

### OPERATION

- \*1. Mount work in the lathe — whenever possible the cut should be from the large diameter toward the small diameter.
- \*2. Set point of tool bit on exact center line.
3. Lathe cross slide and taper slide should move freely, but with no up or down play. Adjust the tension with the gib screws in the cross slide and support bracket.
- \*4. Position taper attachment so it is about in the center of the work. Lock clamp bracket to lathe bed.
- \*5. Move the carriage by hand to make sure there is sufficient travel to complete the taper cut. If there isn't, adjust the compound rest, move the carriage or the taper attachment to a different position.
6. Set the taper bar to taper desired — graduations on left end of bar are marked in degrees (graduations indicate included angle) — the right end in inches per foot.

### FINDING TAPER PER FOOT

Taper per foot is the difference between the diameters of two ends of a tapered piece of work, expressed in inches per foot of length. Taper Per Foot is determined as follows:

Assume a piece of stock has a diameter of 3 1/4" at one end, 2 1/2" at the other, and is 8" long.

$$\text{Taper per foot (in inches)} = \frac{12 (3\frac{1}{4} - 2\frac{1}{2})}{8}$$

$$\text{Taper per foot (in inches)} = \frac{12 \times .750}{8} = 1.125''$$

Set the taper slide on the 1-1/8 graduation mark to right or left of zero, depending upon which way the taper is cut.

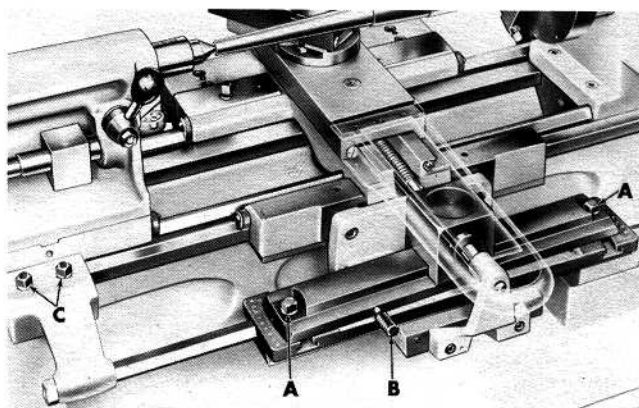
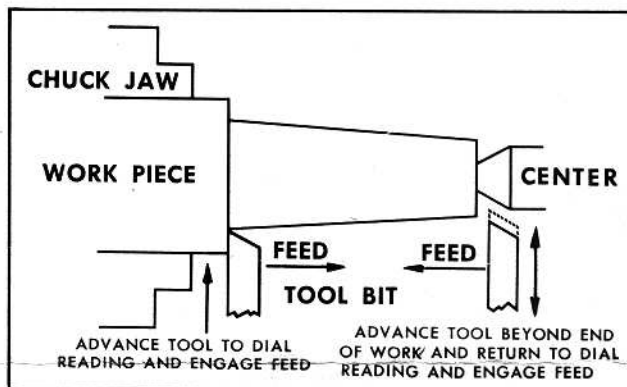
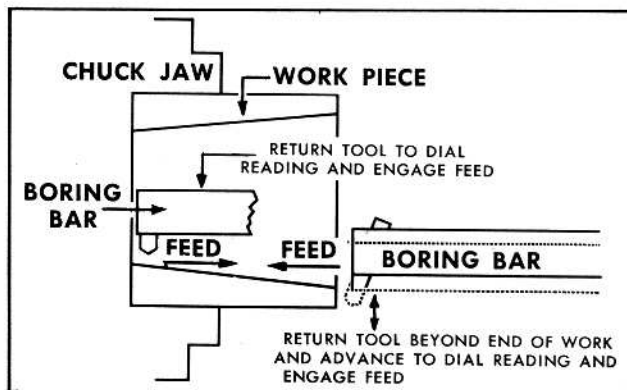


Figure 11

7. To set the attachment for taper desired —
  - A. Loosen the two lock screws (A, fig. 11) on each end of taper bar.
  - B. Turn taper adjusting screw (B) to taper desired.
  - C. Tighten the two taper bar lock screws (A).
  - D. Be sure clamp bracket (C) is locked to lathe bed.
8. Engage feed with tool approximately 1" away from beginning of cut to be sure backlash is removed before tool commences to cut.

Caution: When taper attachment is not in use, loosen clamp (C) so it will slide freely along lathe bed with the movement of the carriage.