A hand-powered winch is shown in the isometric sketch. Using the information in the freehand sketches of the components of the winch, 17-15A through 17-15H:

a. Prepare detail drawings of each component. (Note that layout drawings are omitted in this exercise due to the completeness of the freehand sketches. Discrepancies, if any, will be found while doing the final assembly drawing.)

b. Prepare subassembly drawings of the drum 17-15B, and the handle 17-15H.

c. Prepare a final assembly drawing with a parts list for the winch.
ITEM 15

Fig. 16.105  "Any-Angle" Tool Vise.  (1) Draw details using decimal-inch dimensions or redesign with n dimensions, if assigned.  (2) Draw assembly.  See also Fig. 16.106.
Fig. 16.106  "Any-Angle" Tool Vise  (Continued). See Fig. 16.105 for instructions.
Problem 24-15 (RDP)  ITEM 16

Modify the screw jack shown in the accompanying figure to have an 8-inch vertical movement instead of the apparent 4-inch vertical one.
Problem 17-17

Using detail drawings 17-17A through 17-17O, prepare a three-view assembly drawing and a parts list. Also, the following is a summary of the FITS specified for the various components. (Calculate these and show your work.)

- (1) FN-1/.062 Parts 1, 12
- (2) FN-2/.688 Parts 1, 2
- (3) LC-4/.5 Parts 1, 11
- (4) RC-5/.562 Parts 3, 4
- (5) RC-5/.375 Parts 4, 5
- (6) LC-2/.125 Parts 4, 8
- (7) FN-2/.250 Parts 9, 14
- (8) RC-6/.938 Parts 13, 14, 15