

Fig. 7-8 Auxiliary views added to regular views to show true shape of features.

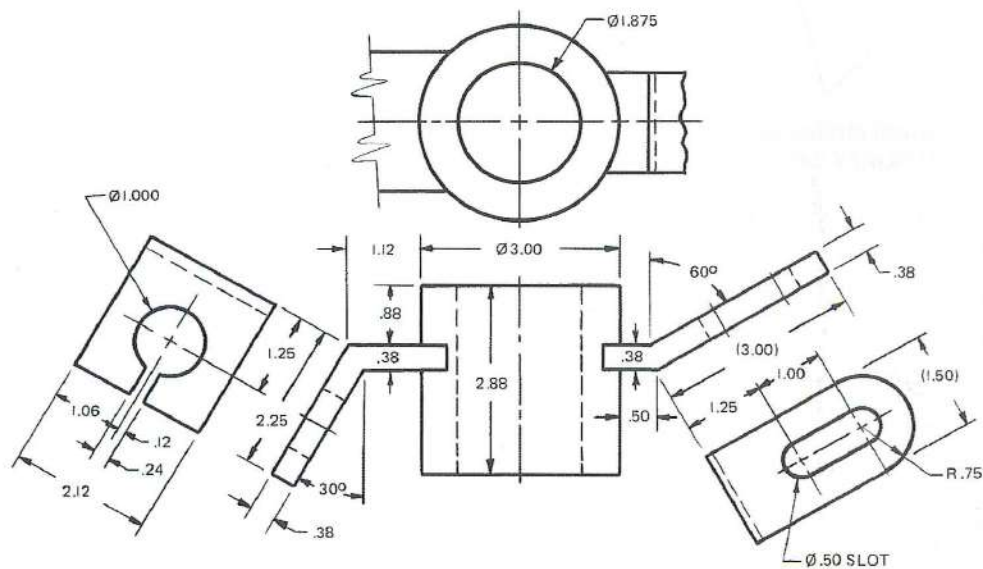


Fig. 7-9 Dimensioning a multi-auxiliary-view drawing.

7-4 SECONDARY AUXILIARY VIEWS

Some objects, because of their shape, require a secondary auxiliary view to show the true shape of the surface or feature. The surface or feature is usually oblique (inclined) to the principal planes of projection. In order to draw a secondary auxiliary view, such as the one shown on the next page in Fig. 7-10, the following steps were used.

Step 1 Draw Partial Front and Top Views Adequate space between these views must be provided for adding the vertical portion of the front view and dimensions. The

remainder of these two views can be completed only after the primary and auxiliary views are drawn.

Step 2 Establish the Primary Auxiliary View This is the key view. It establishes measurements to complete the front and top views. Lines perpendicular to surface *M* in the top view establish the angle of projection. Adequate space must be left between the front and primary auxiliary views to draw the secondary auxiliary view and add dimensions.

Step 3 Establishing the Secondary Auxiliary View Lines perpendicular to surface *N* are extended down to draw the partial secondary auxiliary view (surface *N*). Only on this