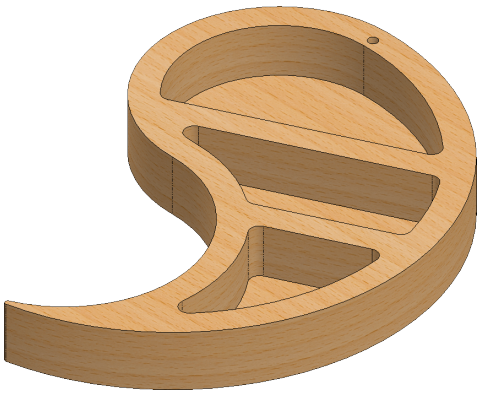
Chapter 4

Jewelry Box
Tray



A. Open Lid Save as "TRAY".

Step 1. Open you Lid file. If already opened, save it.

Step 2. Click File Menu > Save As.

Step 3. Key-in **TRAY** for the filename and press ENTER.

B. Delete Cut-Revolve1 and Sketch2 .

Step 1. Delete **Cut-Revolve1** and **Sketch2** in the Feature Manager. To delete, click Cut-Revolve1 feature and press Delete key, **Fig. 1**. Then, delete Sketch2, **Fig. 2**.

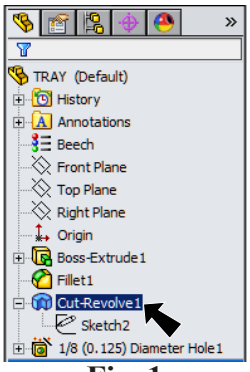


Fig. 1

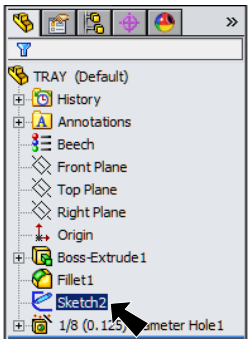


Fig. 2

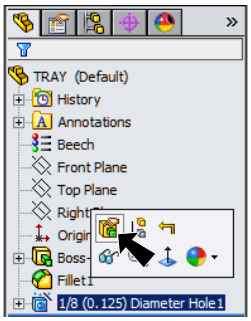


Fig. 3

C. Edit Hole.

Step 1. Click **1/8 Diameter Hole1** feature in the Feature Manager click **Edit Feature** in the Context toolbar, **Fig. 3**.

Step 2. In the Hole Wizard Property Manager set:
under End Condition, **Fig. 4**
Through All
click OK ✔.

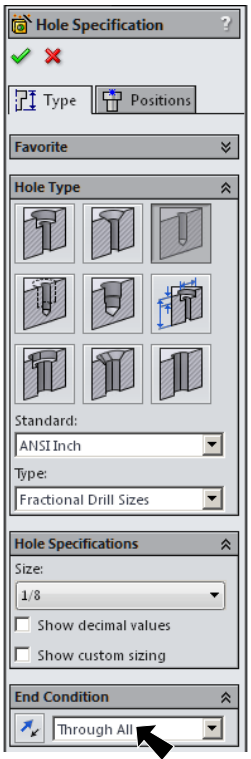


Fig. 4

Fig. 5

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D. Pockets.

Step 1. Click **Top Plane** in the Feature Manager and click **Sketch** from the Context toolbar, **Fig. 6**.

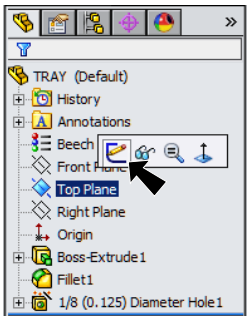


Fig. 6

Step 2. Click **Normal To** on the Standard Views toolbar. (**Ctrl-8**)

Step 3. Click **Centerline** in the **Line flyout** on the Sketch toolbar.

Step 4. Draw a **horizontal centerline out to right from Origin**, **Fig. 7**. Draw another **line from Origin** at angle. To terminate chain, double click back on the line you have just drawn.

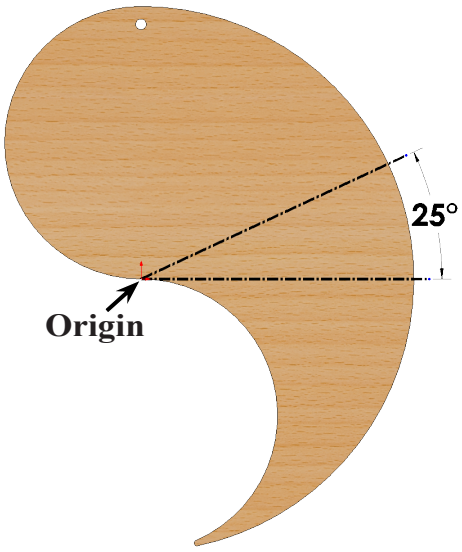


Fig. 7

Step 5. Click **Smart Dimension** (**S**) on the Sketch toolbar.

Step 6. Dimension **angle 25º**, **Fig. 7**.

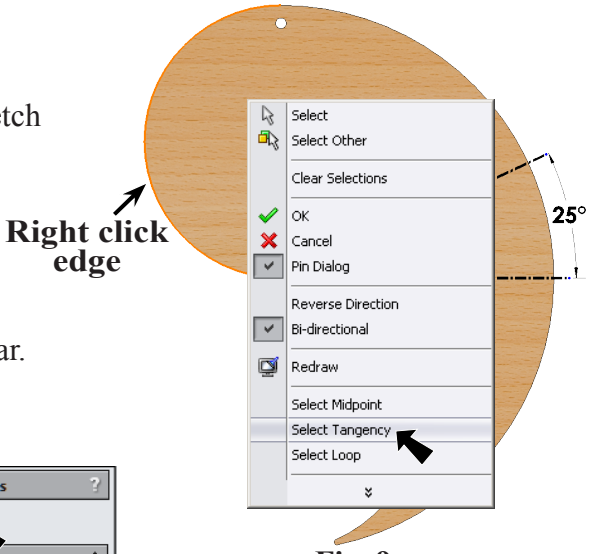


Fig. 9

Step 7. Click **Offset Entities** on the Sketch toolbar.

Step 8. In the Offset Entities Property Manager set:

Distance **.35** **Fig. 8**
right click edge of Tray and click **Select Tangency** from menu, **Fig. 9**
uncheck **Bi-directional**
check **Reverse**

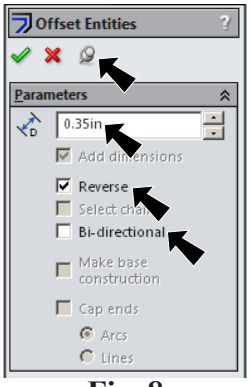


Fig. 8

The yellow offset should be inside, **Fig. 10**. If in wrong direction uncheck Reverse.

Click **Keep Visible** and OK, **Fig. 8**. The Push Pin on pins the Property Manager open.

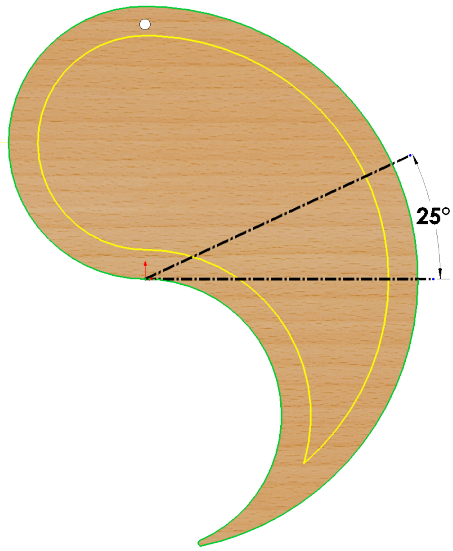


Fig. 10

Step 9. In the Offset Entities Property Manager set:

Distance .8 **Fig. 11**
click **angled line**, **Fig. 12**
check **Reverse**
uncheck **Select chain**

The yellow offset should be **above** angled line, **Fig. 11**. If in wrong direction uncheck Reverse.

Click OK .

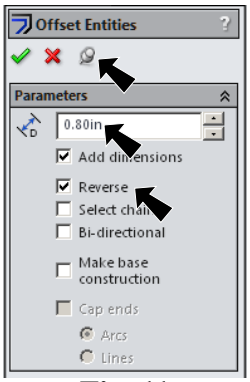


Fig. 11

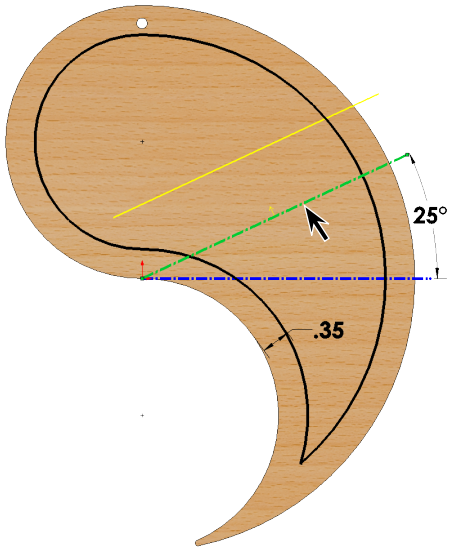


Fig. 12

Step 10. In the Offset Entities Property Manager set:

Distance .7 **Fig. 13**
click **angled line**, **Fig. 14**
uncheck **Reverse**

The yellow offset should be **below** angled line, **Fig. 13**. If in wrong direction check Reverse.

Click OK .

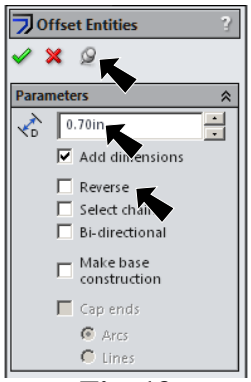


Fig. 13

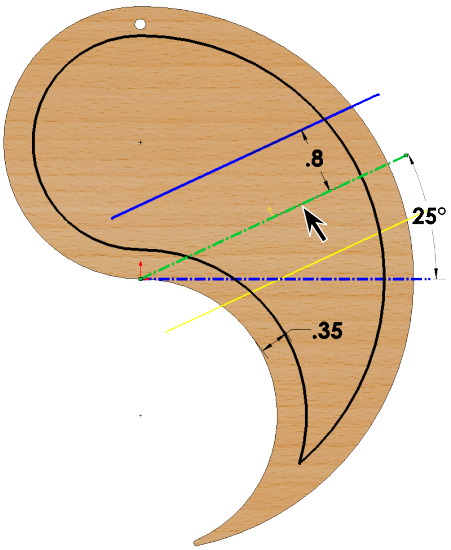


Fig. 14

Step 11. In the Offset Entities Property Manager set:

Distance .175 **Fig. 15**
check **Bi-directional**
click **both offset lines**, **Fig. 16**
click OK **twice**.

Step 12. Save. Use **Ctrl-S**.

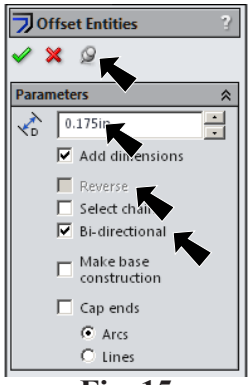


Fig. 15

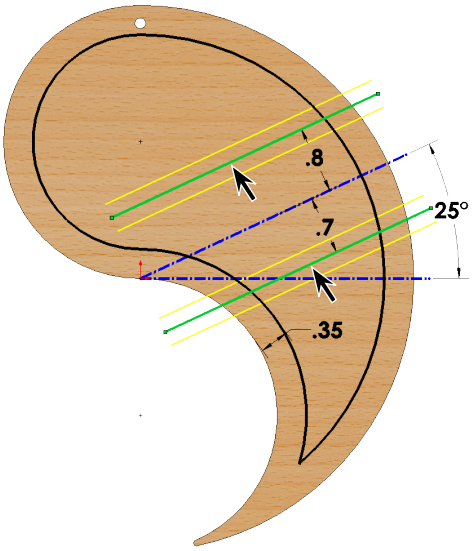


Fig. 16

Step 13. Grab the left end-point of construc-tion line and snap back to Origin to create coincident relation, **Fig. 17** and **Fig. 18**.

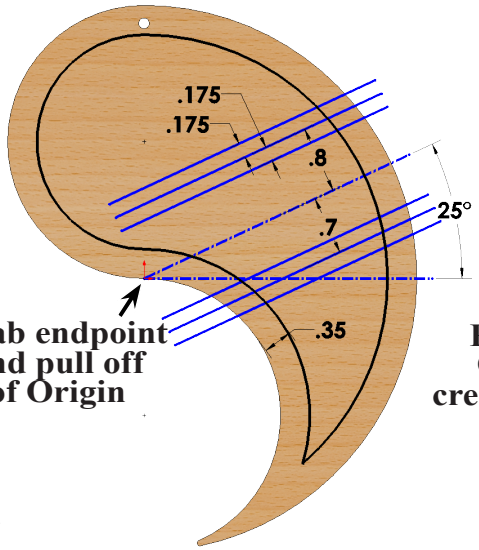


Fig. 17

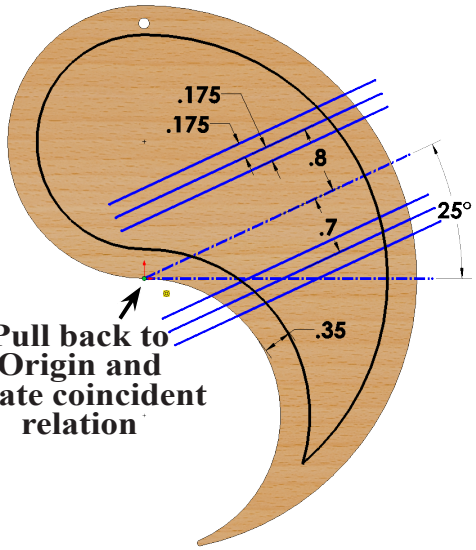
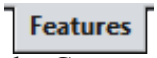


Fig. 18

Step 14. Drag the left endpoint of both top .175 offset lines out beyond the .35 offset arc, **Fig. 19** and **Fig. 20**.

Step 15. Click **Isometric** on the Standard Views toolbar. (**Ctrl-7**)

Step 16. Click **Features**  on the Command Manager and **Extruded Cut** on the Features toolbar.

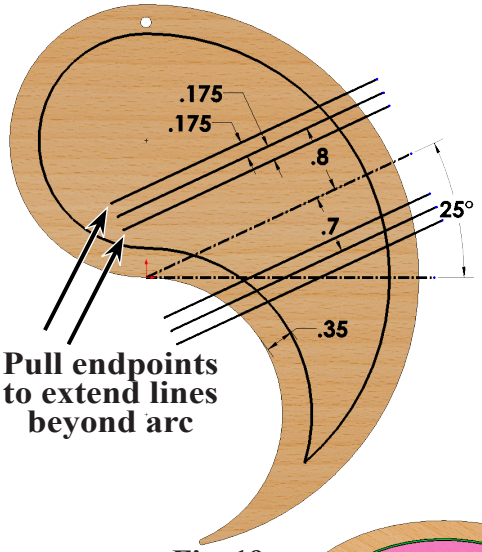


Fig. 19

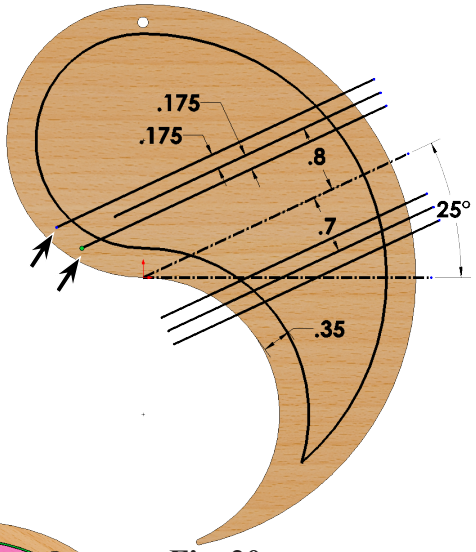


Fig. 20

Step 17. In the Cut-Extrude Property Manager set:
under Direction 1, **Fig. 21**
Depth **.65**
under Selected Contours
click **3 contours**, **Fig. 22**
click OK .

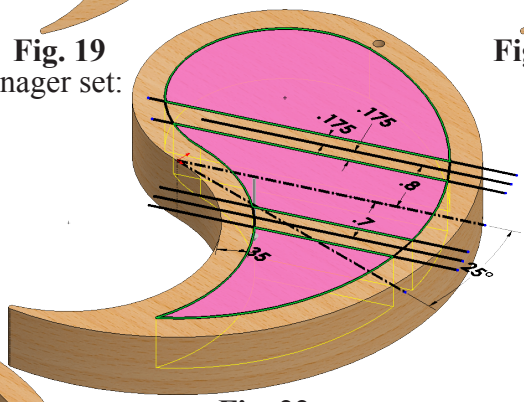


Fig. 22

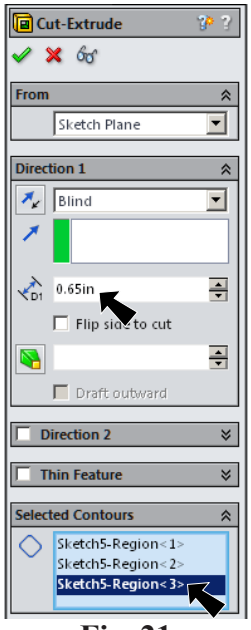


Fig. 21

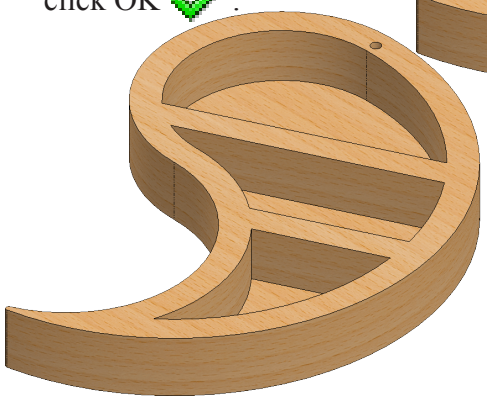


Fig. 23

E. Fillet Edges.

Step 1. Click **Fillet**

on the Features toolbar.

Step 2. In the Fillet Property Manager:

select **FilletXpert**, **Fig. 24**

Radius **.125**

click a **vertical edge of a pocket**, **Fig. 25**

click **Connected to end internal loops**, **8 Edges** on the Fillet pop-up toolbar, **Fig. 25**

click OK .

Step 3. Save. Use **Ctrl-S**.

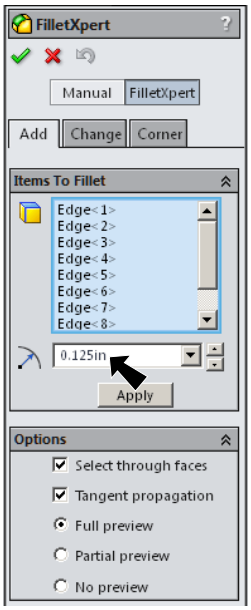


Fig. 24

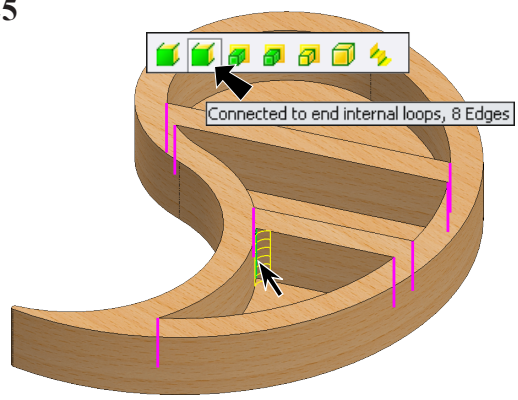


Fig. 25

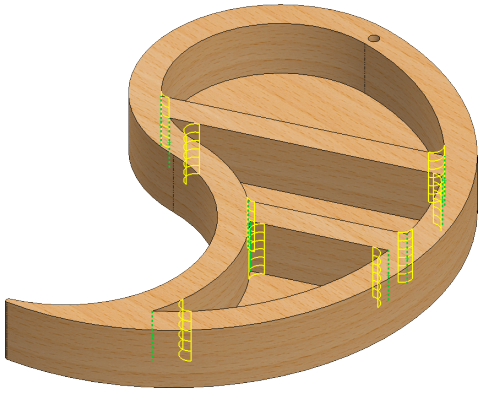


Fig. 26

Fig. 27