

Chapter 9**COVE BLOCK****A. OPEN B FILE.**

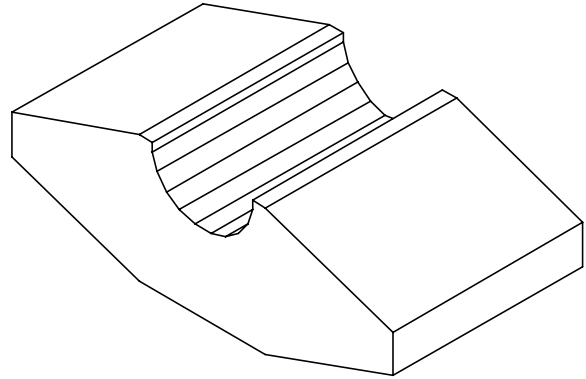
Step 1. When you start a new drawing away start with the B file. If you started this drawing as the B file go directly to Steps B. If your did not start as the B file complete these Steps: Click **Open** from the File Menu. Click **No** to save current part. Key in **a:b** for the filename and press ENTER.

B. TURN OFF GRID and SNAP.

Step 1. Turn off the Grid and Snap. Use **CTRL-G**. Hold down CTRL and press G.

Step 2. Click **Off** in Grid Properties Display.

Step 3. Click to **uncheck Active** in Snap Properties. Click OK.

**C. CHANGE TO SIDE VIEW.**

Step 1. Change to Side View. Use **ALT-V** 2. Hold down ALT and press V. Key in 2 and press ENTER.

D. CREATE A RECTANGLE.

Step 1. ESC to Main Menu.

Step 2. F1 CREATE.

Step 3. F1 LINE.

Step 4. F7 RECTANGLE.

Step 5. F2 WIDTH/HEIGHT.

Step 6. Key in **6** for width and press ENTER.

Step 7. Key in **2** for height and press ENTER.

Step 8. F9 KEY-IN.

Step 9. Key in:
Zero (0) for coordinate X and press ENTER.
0 for Y and press ENTER.
0 for Z and press ENTER.

Step 10. Use **ALT-A** to center the rectangle on the screen. Hold down ALT and press A.

E. DRAW LINES USING ALONG LINE.

Step 1. ESC to Main Menu.

Step 2. Change color to **yellow**. Click the color swatch in the side Tool Bar. Click the yellow, number 4.

Step 3. F1 CREATE.

Step 4. F1 LINE.

Step 5. F1 ENDPOINTS.

Step 6. F6 ALONG LINE.

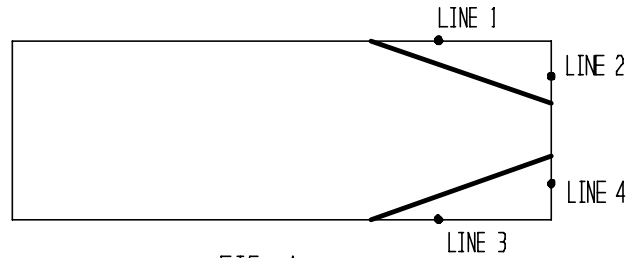


FIG. 1

Step 7. To indicate Start Point move cursor to the top line, Line 1, **Fig. 1** and click.

Step 8. Key in **2 for distance** and press ENTER.

Step 9. To indicate End Point move cursor to the side line, Line 2, **Fig. 1** and click.

Step 10. Key in **.7 for distance** and press ENTER.

Step 11. Repeat at the bottom. To indicate Start Point move cursor to the bottom line, Line 3, **Fig. 1** and click.

Step 12. Key in **2 for distance** and press ENTER.

Step 13. To indicate End Point move cursor to the side line, Line 4 and click.

Step 14. Key in **.7 for distance** and press ENTER.

Step 15. Use CTRL-R to clear temporary markers. Hold down CTRL and press R.

Step 16. Save the drawing. Click **Save As** from the File Menu. Key in **a:cove block** for the file-name and press ENTER. Press ESC for Part Description.

F. MIRROR LINES.

Step 1. ESC to Main Menu.

Step 2. F4 X-FORM.

Step 3. F5 MIRROR.

Step 4. F2 COPY.

Step 5. F1 SINGLE.

Step 6. Click the yellow lines, Lines 5 and 6, **Fig. 2**, and press ENTER.

Step 7. F3 2 POINTS.

Step 8. F4 CENTER.

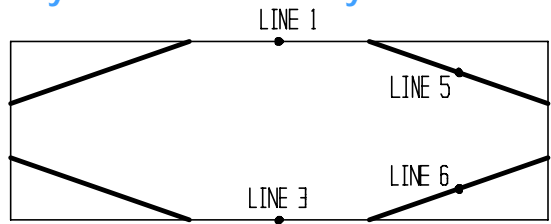


FIG. 2

Step 9. To indicate first position on the plane, click the top line, Line 1, **Fig. 2**.

Step 10. To indicate second position on the plane, click the bottom line, Line 3, **Fig. 2**.

Step 11. Use CTRL-R to clear highlighted entities and temporary markers. Hold down CTRL and press R.

Step 12. Save the drawing. Use **CTRL-S** to save.

G. ADD THE 3rd DIMENSION.

Step 1. Change to the Isometric View. Use **ALT-V 7**. Hold ALT and press V. Key in 7 and press ENTER.

Step 2. Use **ALT-A** to center the drawing on the screen. Hold down ALT and press A.

Step 3. ESC to Main Menu.

Step 4. F4 X-FORM.

Step 5. F1 DELTA.

Step 6. F3 JOIN.

Step 7. F7 ALL DISPLAYED.

Step 8. F1 ALL.

Step 9. Key in 1 for the Number of Copies and press ENTER.

Step 10. Key in:
 0 for dX and press ENTER.
 3 for dY and press ENTER.
 0 for dZ and press ENTER.

Step 11. Use **ALT-A** to center the drawing on the screen. Hold down ALT and press A.

H. DELETE CORNER LINES.

Step 1. ESC to Main Menu.

Step 2. Delete the corner lines, Lines 1 thru 4 by using **CTRL-Q**. Hold down CTRL and press Q. Move the cursor over the line and select the four lines with clicks. After all four lines are selected, press ENTER.

I. EDIT USING TRIM FIRST.

Step 1. ESC to Main Menu.

Step 2. F2 EDIT.

Step 3. F1 TRIM/EXTEND.

Step 4. F1 FIRST.

Step 5. To trim part of a line, click the line you are to keep, Line 1, **Fig. 4**. Move cursor close to the intersection with Line 2 and click. Repeat at the other end of Line 1. That is, click the part of the line you are keeping, Line 1, then move cursor close to Line 2 and click. Trim all Line 1's at Line 2's.

Step 6. To trim part of a line, click the line you are to keep, the vertical lines, Lines 3, **Fig. 5**. Move cursor close to the intersection with Line 2 and click. Repeat at other end of Line 3. That is, click the part of the line you are keeping, Line 3, then move cursor close to the intersection with Line 2 and click. Trim all Line 3's at Line 2's.

Step 7. Save the drawing. Use **CTRL-S** to save.

J. DRAW POLYLINES N-GONS

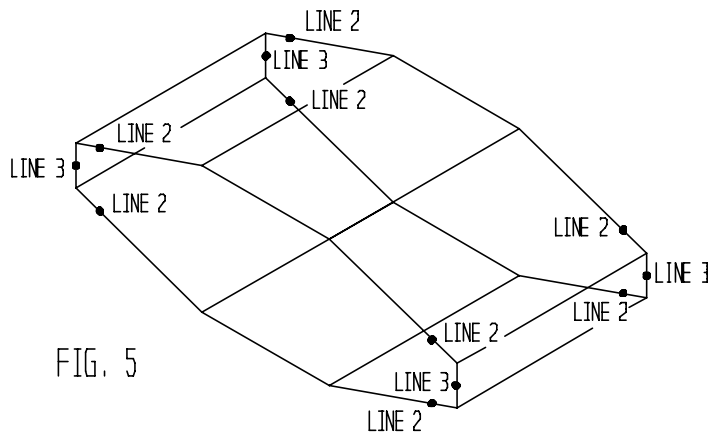
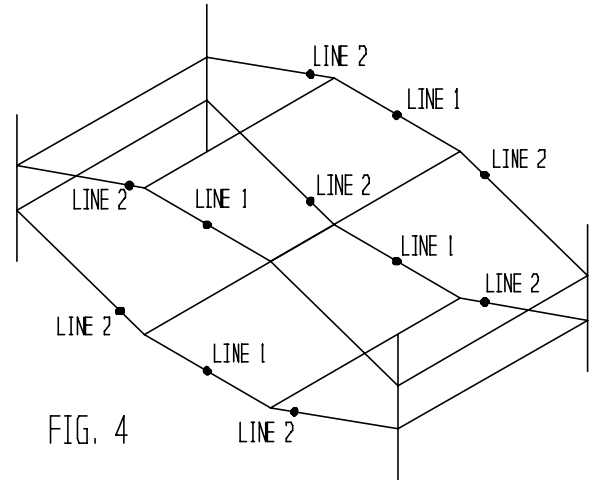
Step 1. Change to the Side View. Use **ALT-V 2**. Hold down ALT and press V. Key in 2 and press ENTER.

Step 2. Change color to **red**. Click the color swatch in the side Tool Bar. Click the red, number 2.

Step 3. ESC to Main Menu.

Step 4. F1 CREATE.

Step 5. F5 POLYLINE.



Step 6. F3 N-GON.

Step 7. Key in **20** for the Number of Side.

Step 8. Key in 0 for Rotation Angle.

Step 9. Key in **.8** for Radius and press ENTER.

Step 10. F1 CORNER.

Step 11. F4 CENTER as method of locating centers of N-gons.

Step 12. Click on the top line of the cove block, Line 1, **Fig. 6**.

Step 13. Save the drawing. Use **CTRL-S** to save.

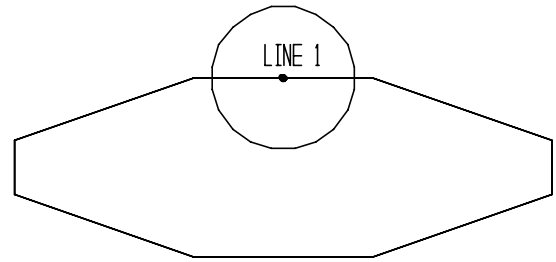


FIG. 6

K. EDIT USING TRIM DOUBLE.

Step 1. Change to the Isometric View. Use **ALT-V**. Hold ALT and press V. Key in 7 and press ENTER.

Step 2. ESC to Main Menu.

Step 3. F2 EDIT.

Step 4. F1 TRIM/EXTEND.

Step 5. F3 DOUBLE.

Step 6. Click the n-gon Line 4, **Fig. 7** as the line to keep, then click the intersections with the n-gon, Intersections 2 and 3.

Step 7. Save the drawing. Use **CTRL-S** to save.

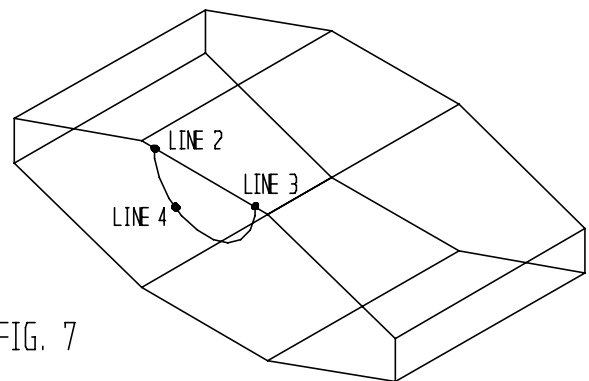


FIG. 7

L. ADD THE 3rd DIMENSION.

Step 1. ESC to Main Menu.

Step 2. F4 X-FORM.

Step 3. F1 DELTA.

Step 4. F3 JOIN.

Step 5. F1 SINGLE.

Step 6. Click the n-gon, Line 4, **Fig. 8**, and press ENTER.

Step 7. Key in 1 for the Number of Copies and press ENTER.

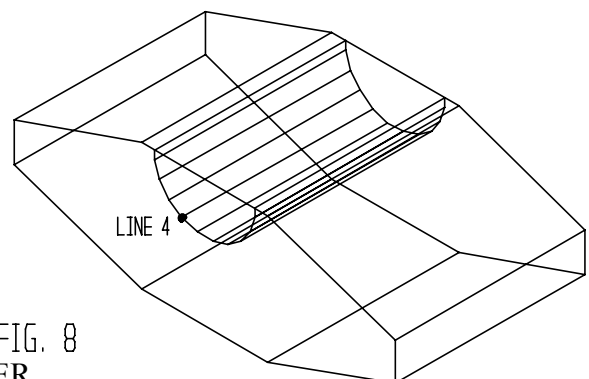


FIG. 8

- Step 8. Key in:
 0 for dX and press ENTER.
 3 for dY and press ENTER.
 0 for dZ and press ENTER.
- Step 9. Use **CTRL-R** to clear highlighted entities. Hold down CTRL and press R.
- Step 10. Save the drawing. Use **CTRL-S** to save.

M. EDIT USING DIVIDE.

- Step 1. ESC to Main Menu.
- Step 2. F2 EDIT.
- Step 3. F1 TRIM/EXTEND.
- Step 4. F4 DIVIDE.

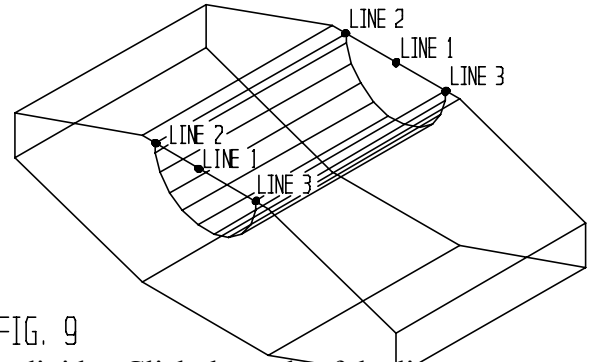


FIG. 9

- Step 5. Click the middle of Line 1, **Fig. 9** as the line to divide. Click the ends of the line you want to trim divide, Intersections 2 and 3. Repeat at the other Line 1. That is, click the middle of Line 1, as the line to divide. Click the ends of the line you want to trim divide, Intersections 2 and 3.
- Step 6. Use **CTRL-S** to save.

N. DELETE HIDDEN LINES.

- Step 1. ESC to Main Menu.
- Step 2. Delete the hidden lines, Lines 1 thru 7, **Fig. 10**, by using **CTRL-Q**. Hold down CTRL and press Q. Move the cursor over the line and select the seven lines with clicks. After all seven lines are selected, press ENTER.

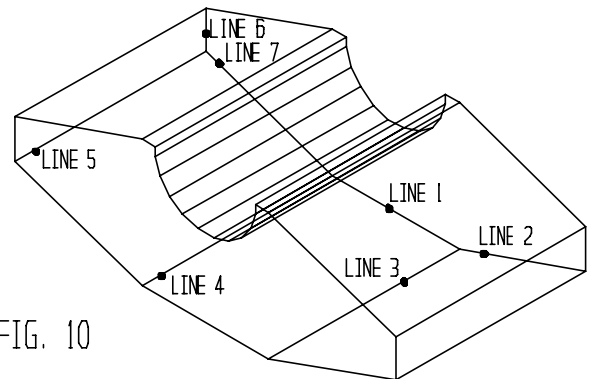


FIG. 10

O. TRIM HIDDEN LINES USING EDIT, TRIM FIRST.

- Step 1. Use **ALT-W** to zoom in on the area to trim. Hold down ALT and press W. Move the cursor to just outside the top right corner of the front end of the cove, **Fig. 11**. Click to start the window. Stretch the window by moving the mouse to surround the cove with the window. Click to set the window.

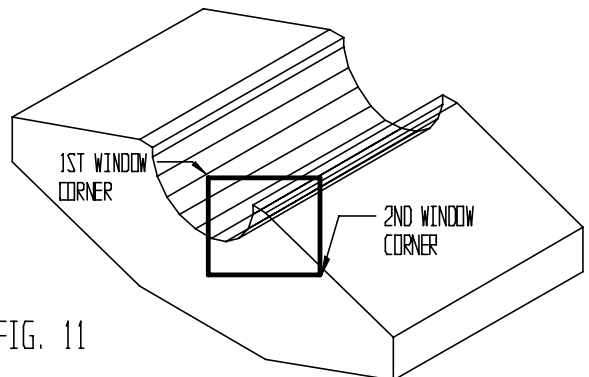


FIG. 11

- Step 2. ESC to Main Menu. **CadKey COVE BLOCK Page 9-6**

Step 3. F2 EDIT.

Step 4. F1 TRIM/EXTEND.

Step 5. F1 FIRST.

Step 6. To trim part of a line, click the line you are to keep, Line 1, **Fig. 12**. Move cursor close to the intersection with Line 2 and click. Repeat at the other Line 2. That is, click the part of the line you are keeping, Line 1, then move cursor close to Line 2 and click.

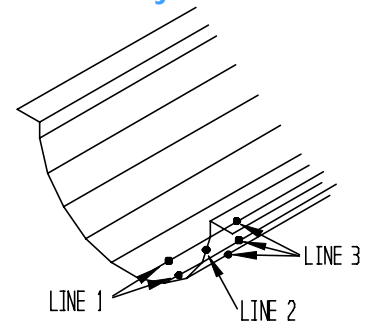
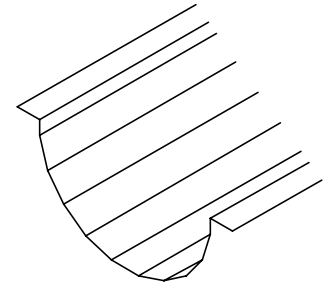


FIG. 12

Step 7. Delete the hidden lines, Lines 3, **Fig. 12**, by using **CTRL-Q**. Hold down CTRL and press Q. Move the cursor over the line and select the two lines with clicks and press ENTER.



Step 8. Use **CTRL-S** to save.

Step 9. Use **ALT-A** to center cove block on the screen. Hold down ALT and press A.

Step 10. Use **ALT-W** to zoom in on the back of the cove. Hold down ALT and press W. Move the cursor to just outside the right corner of the back of the cove, **Fig. 13**. Click to start the window. Stretch the window by moving the mouse to surround the cove with the window. Click to set the window.

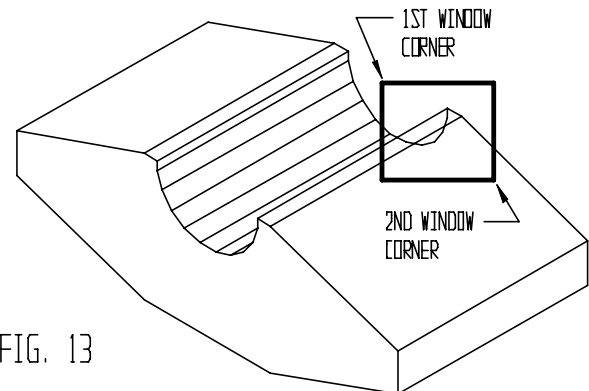


FIG. 13

Step 11. To trim part of a line, click the line you are to keep, Line 1, **Fig. 14**. Move cursor close to the intersection with Line 2 and click. See **Fig. 15**.

Step 12. Use **ALT-A** to center cove block on the screen. Hold down ALT and press A.

Step 13. Use **CTRL-S** to save.

P. ADD YOUR NAME AND THE PERIOD TO DRAWING.

Step 1. Use **Alt-H** to reduce the drawing half size. Hold down ALT and press H. Use: **Detail, Note, Key-In** commands to add text.

Step 2. Use **CTRL-S** to save.

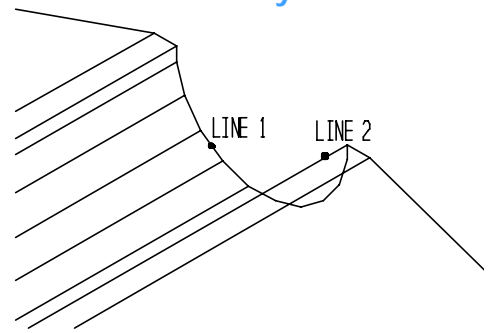


FIG. 14

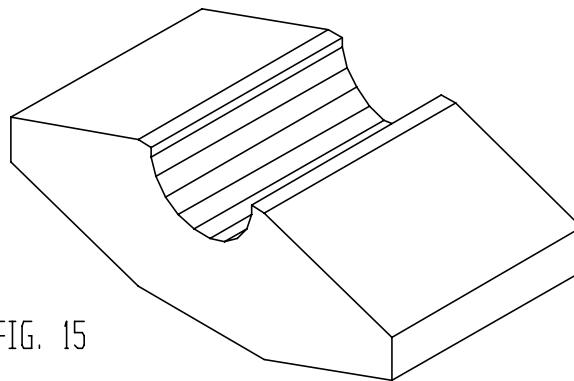
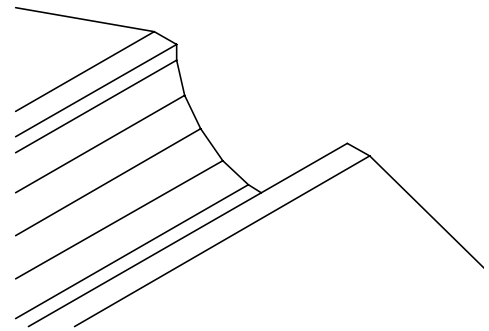


FIG. 15