

Figure 7-0.1  
A Section Created with CAD.

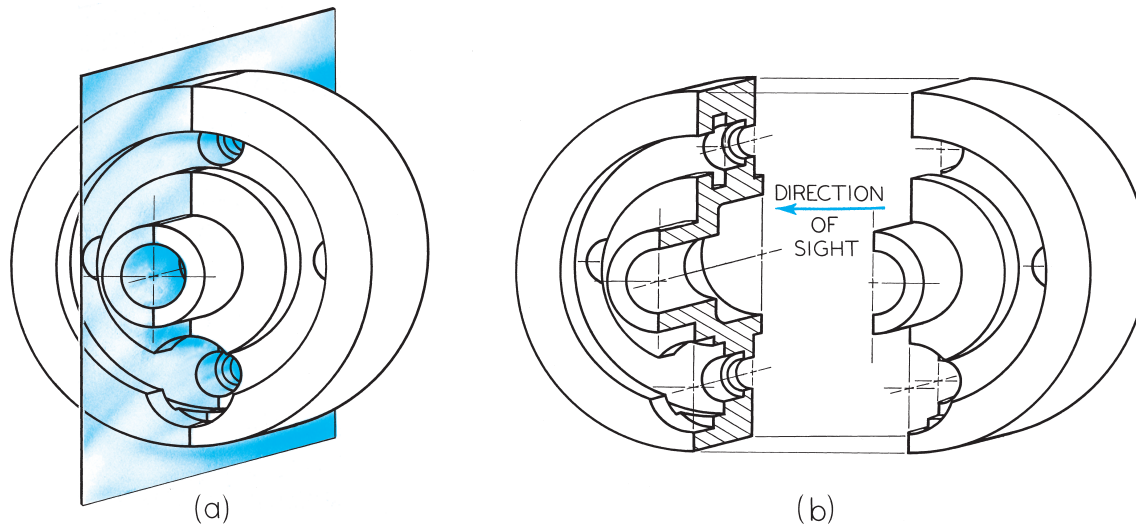
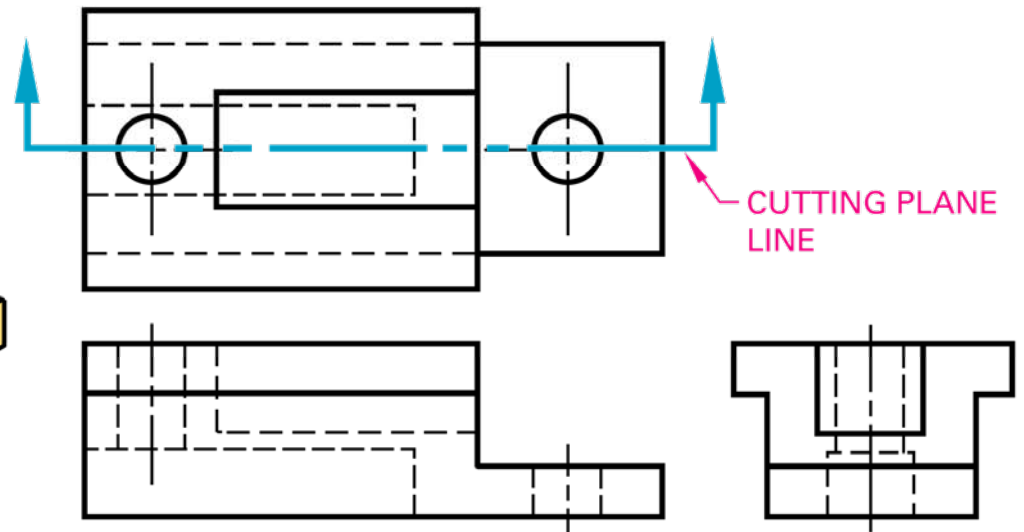
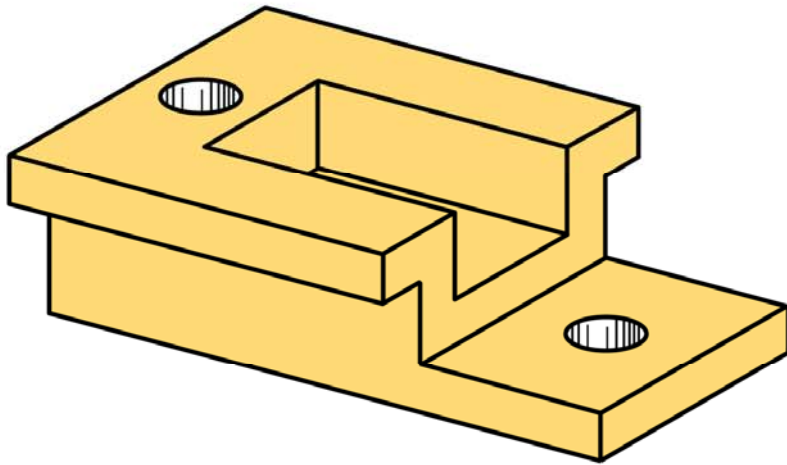


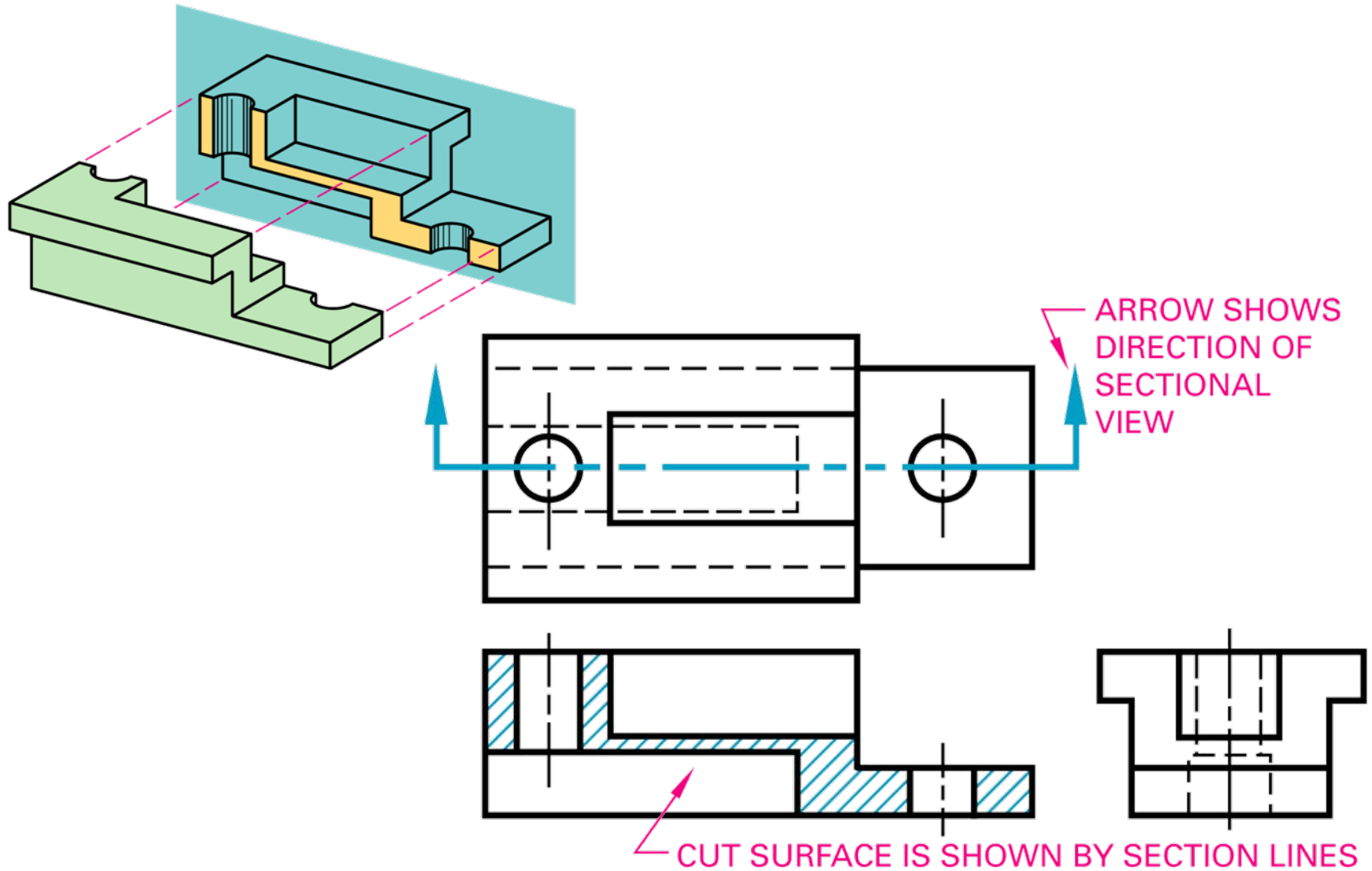
Figure 7-1  
A Section.

# Sectional Views

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# Sectional Views



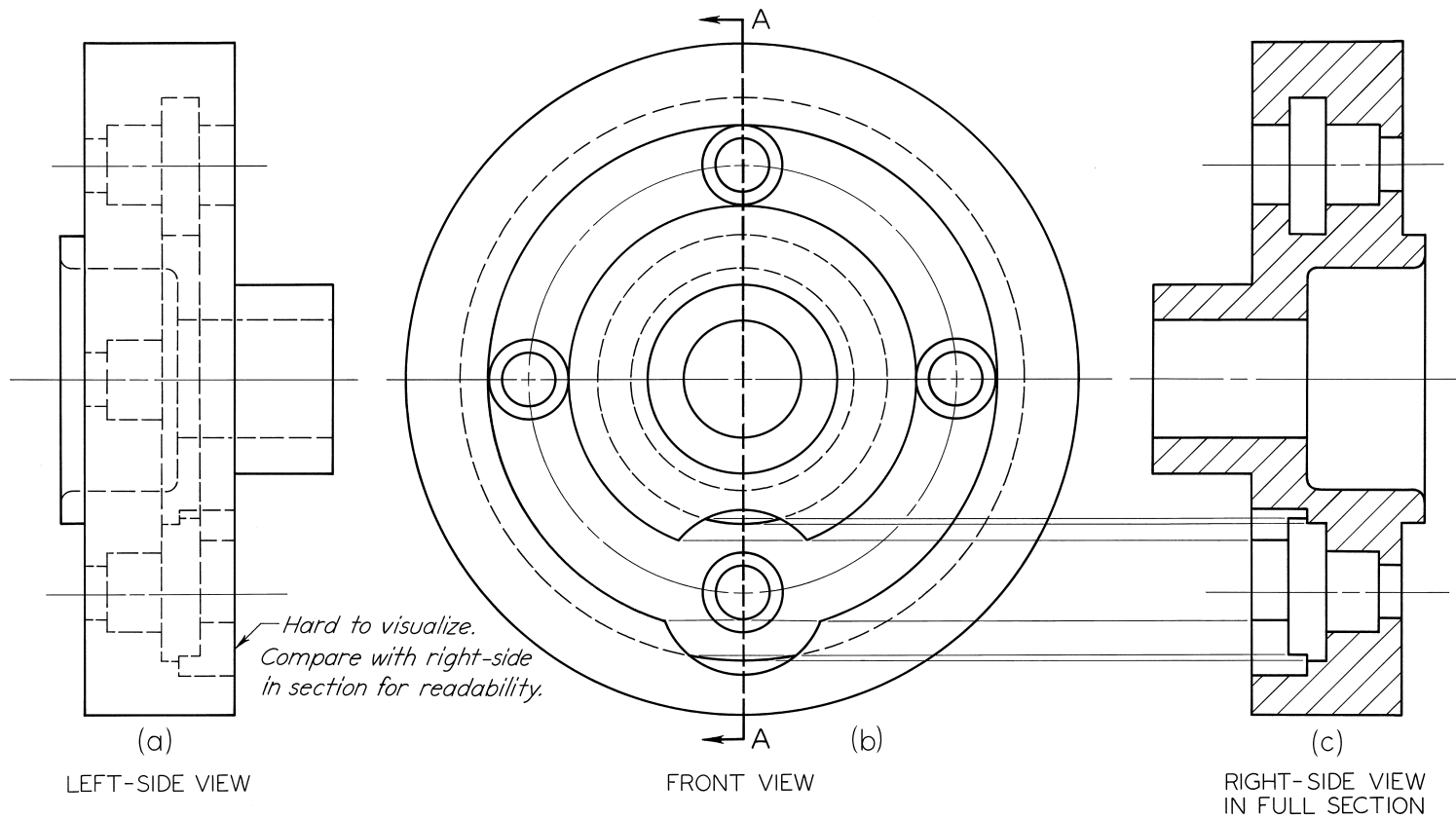


Figure 7-2  
Full Section.

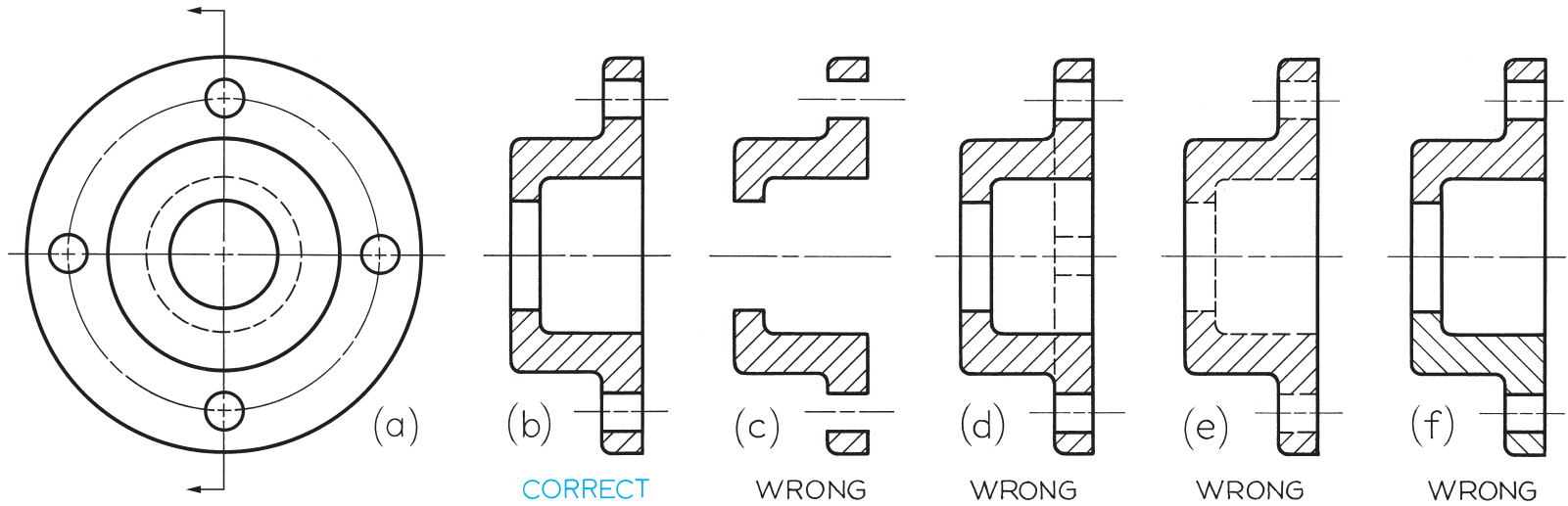


Figure 7-3  
Lines in Sectioning.

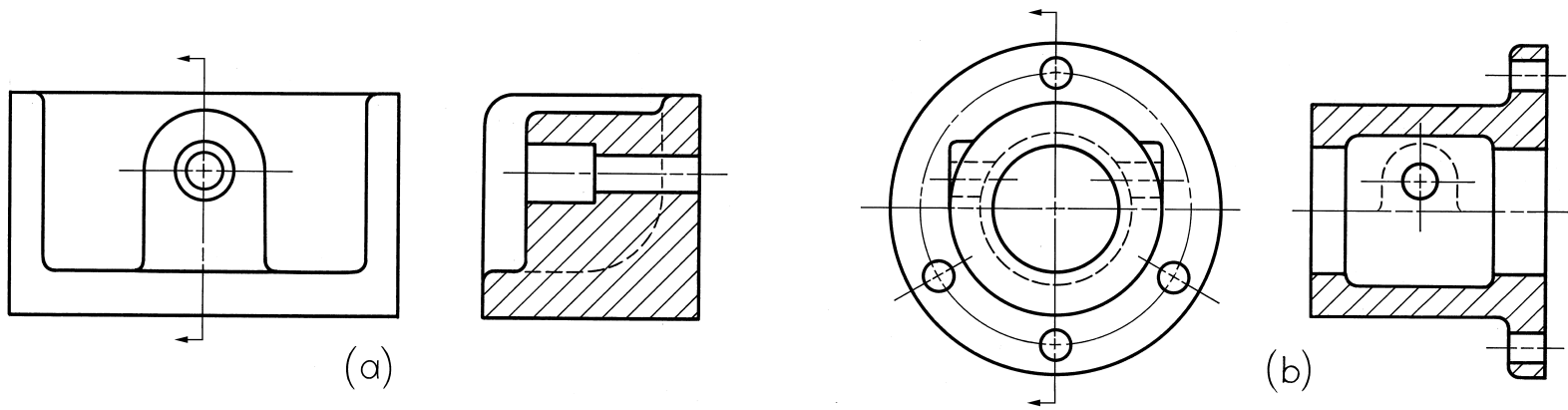


Figure 7-4  
Hidden Lines in Sections.

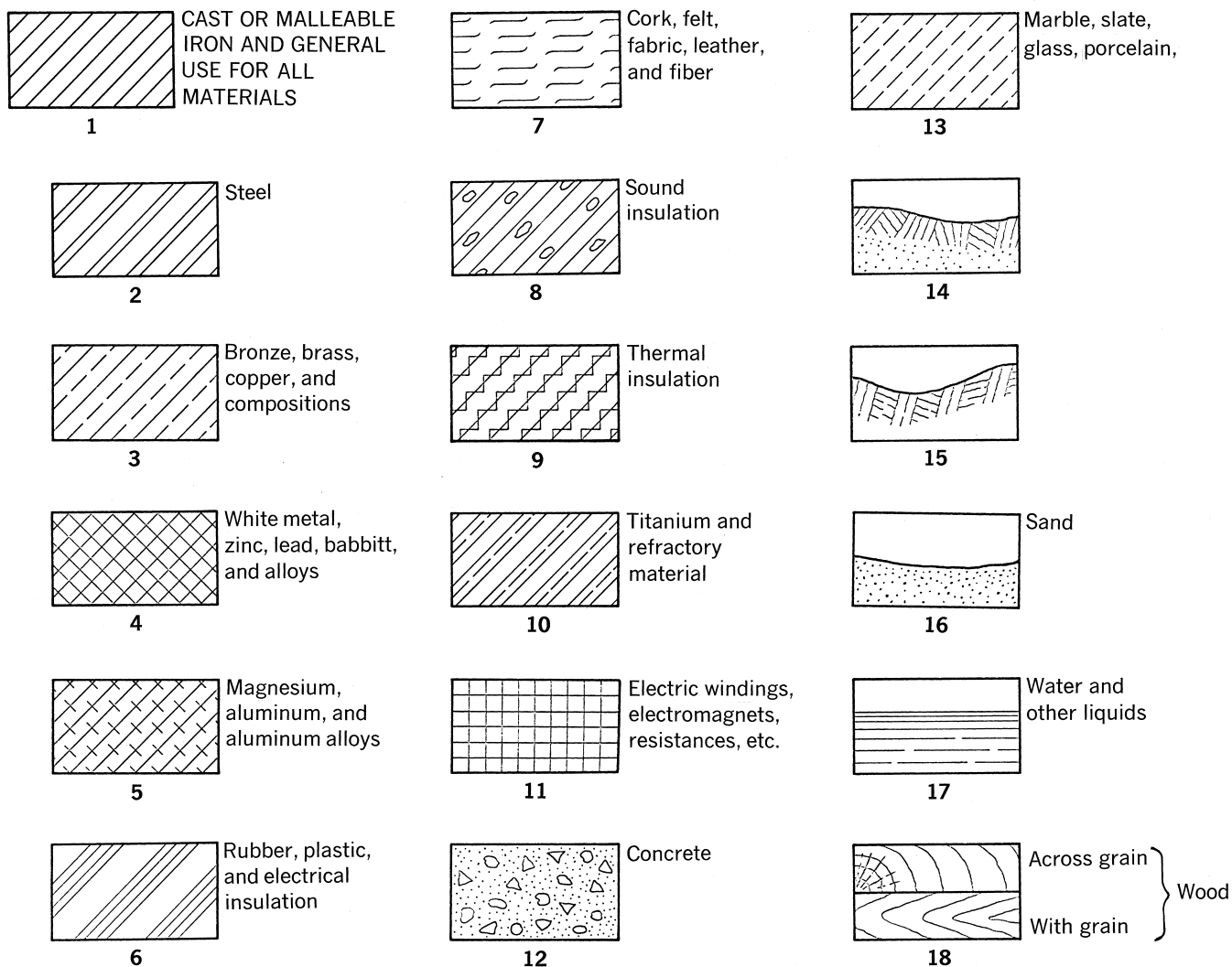


Figure 7-5  
Symbols for Section Lining.



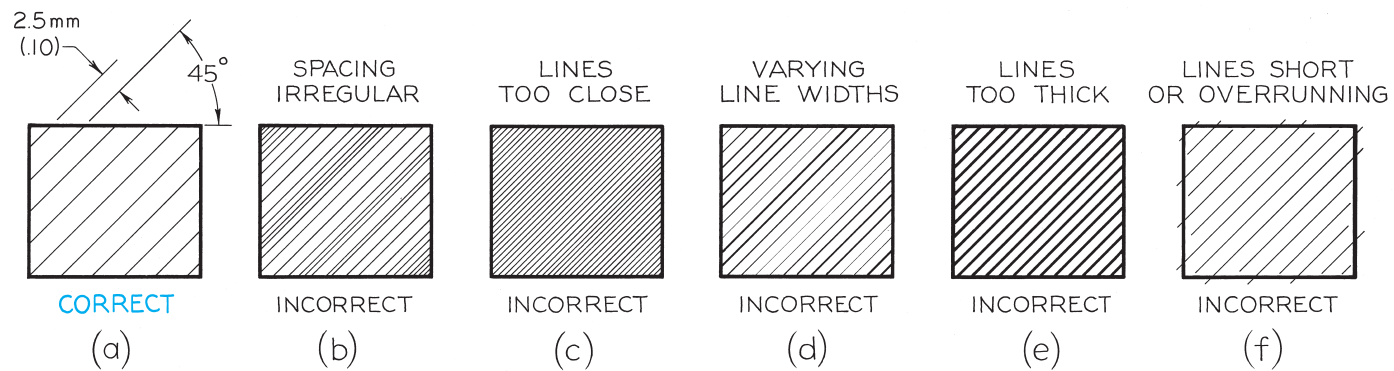


Figure 7-6  
Section-Lining Technique

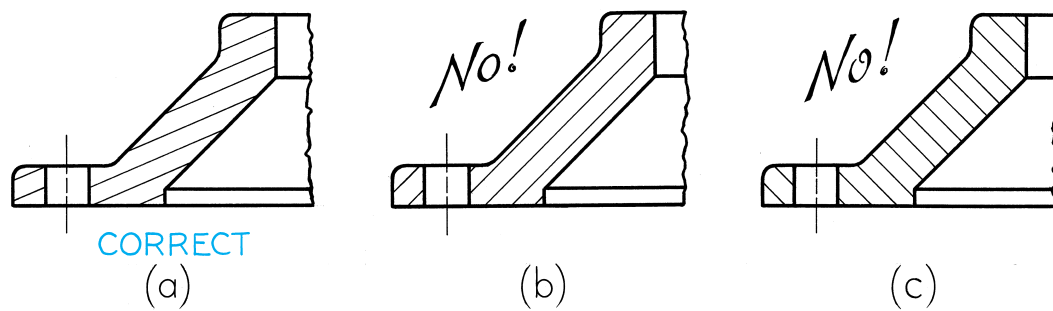


Figure 7-7  
Direction of Section Lines.

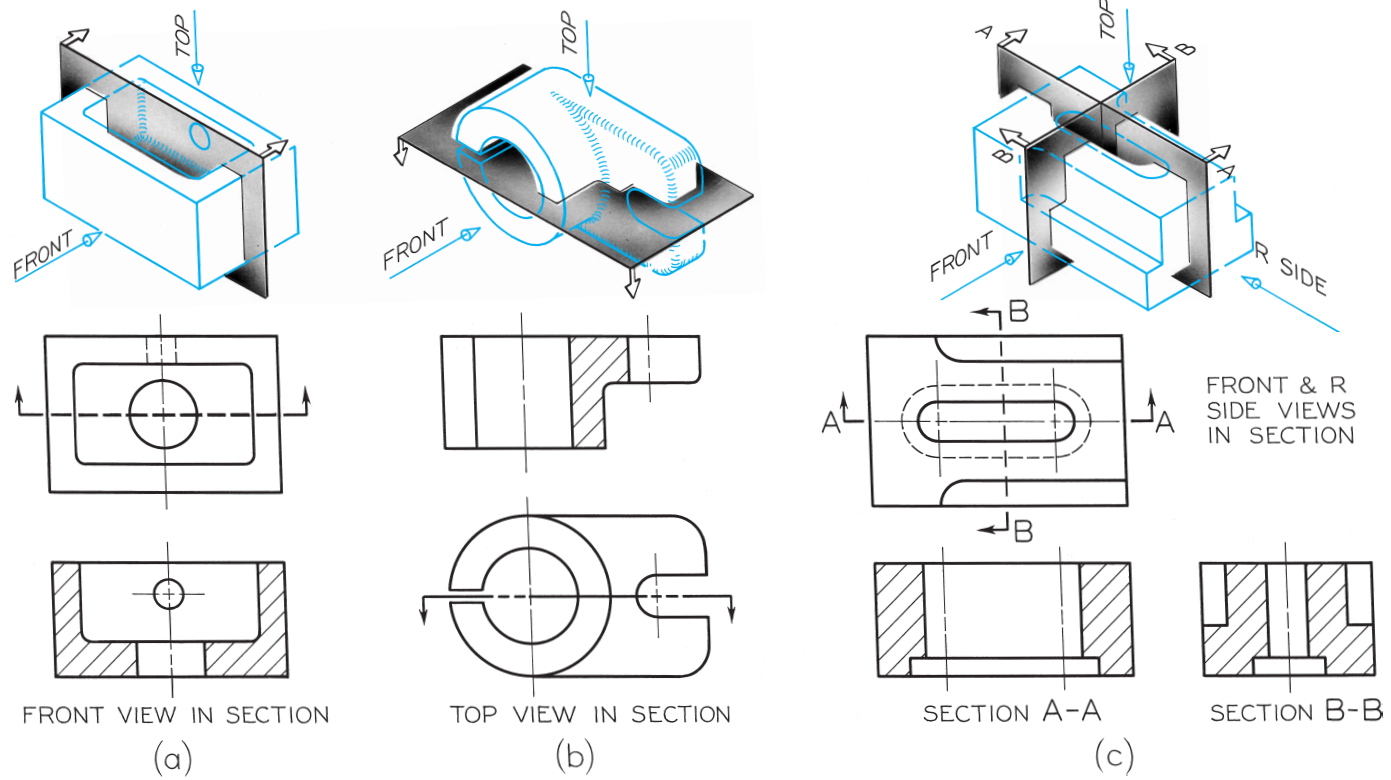


Figure 7-8  
Cutting planes and Sections.

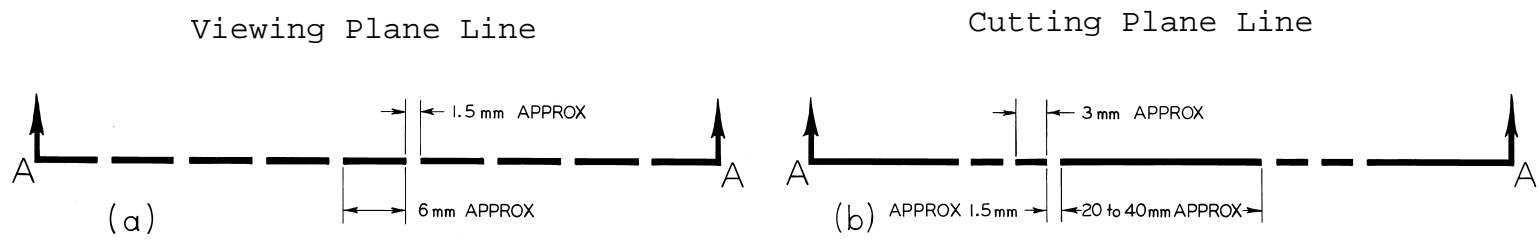


Figure 7-9  
Cutting-Plane Lines (Full Size).

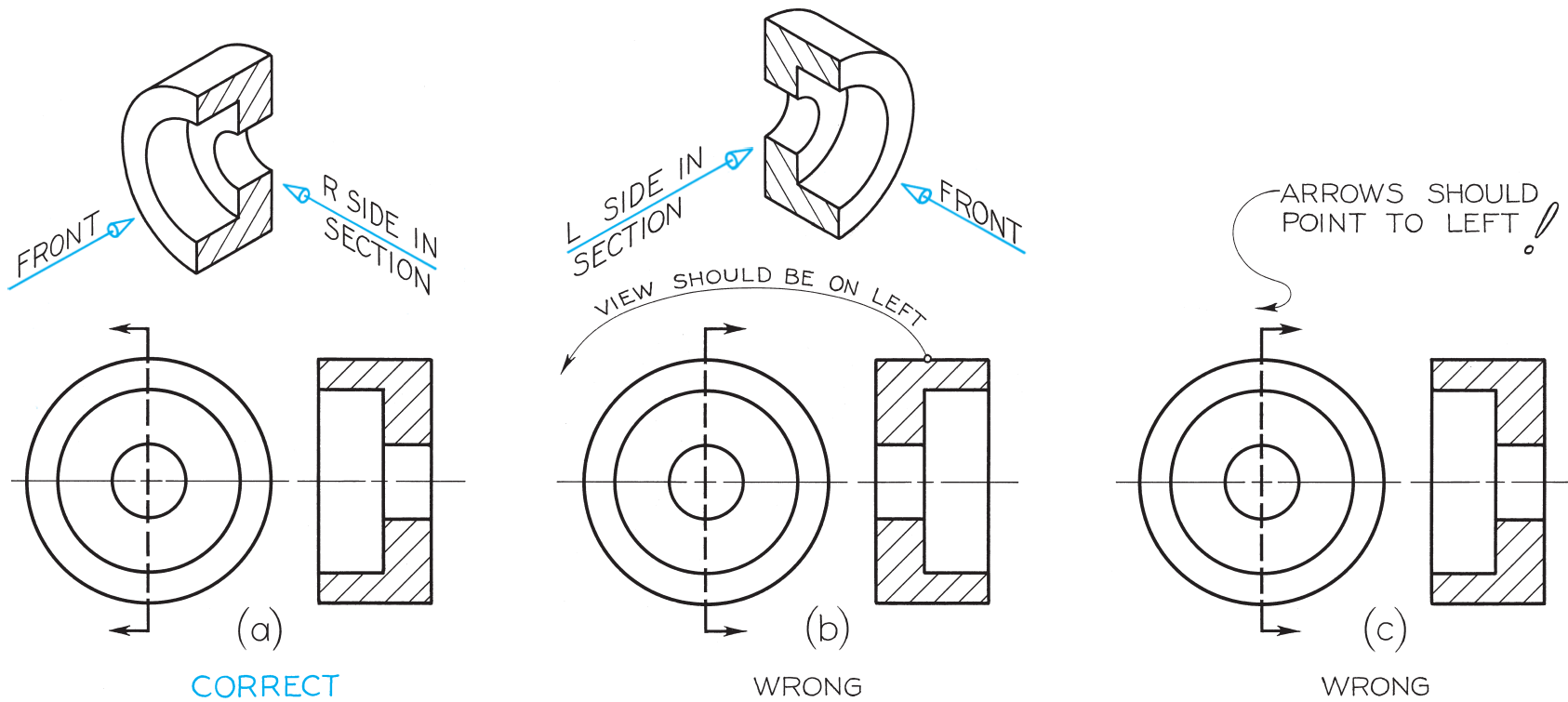


Figure 7-10  
Cutting Planes and Sections.

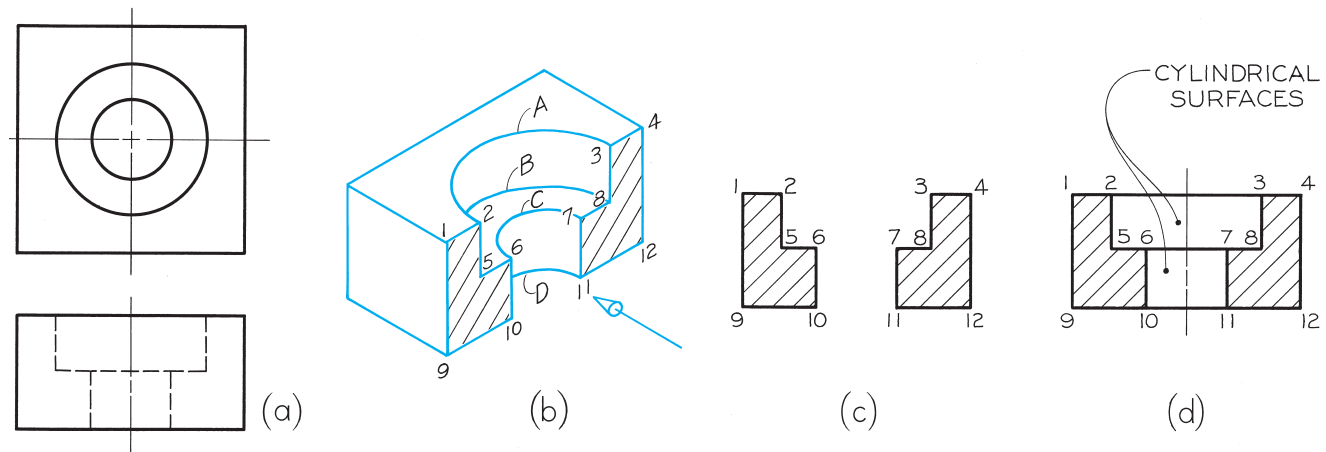
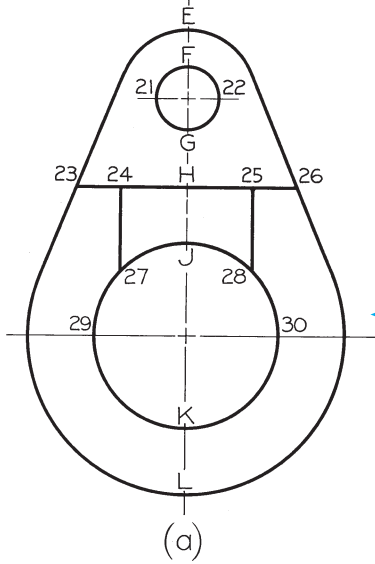
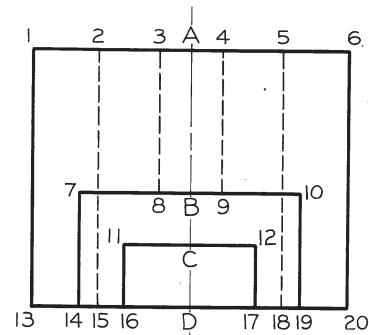


Figure 7-11  
Visualizing a Section.



*Numbers in pictorial correspond with those on sectional view.*

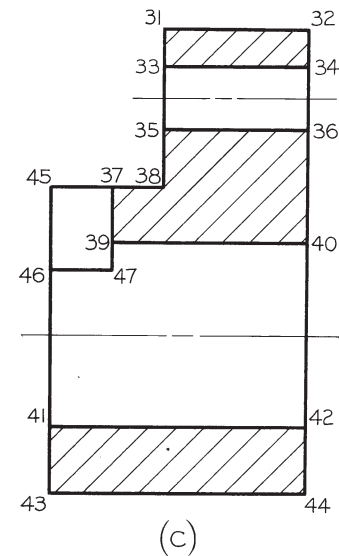
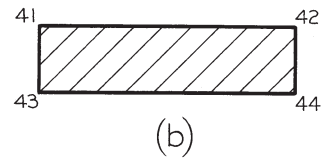
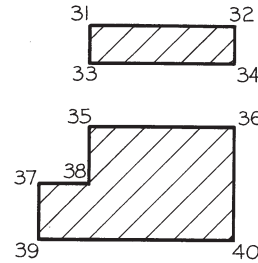
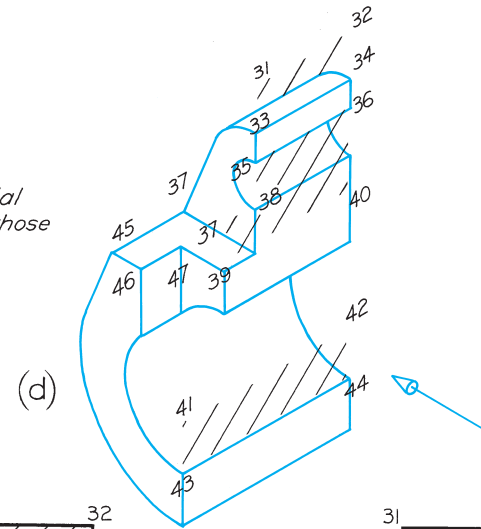
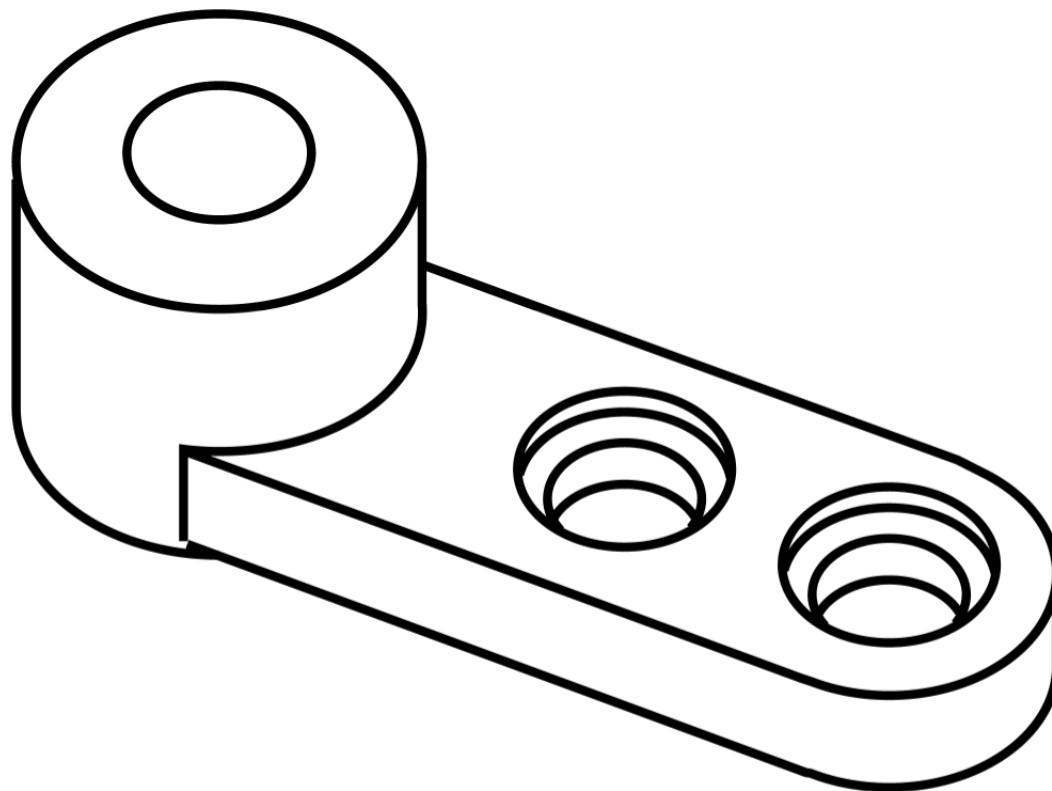


Figure 7-12  
Drawing a Full Section.

# Full Section

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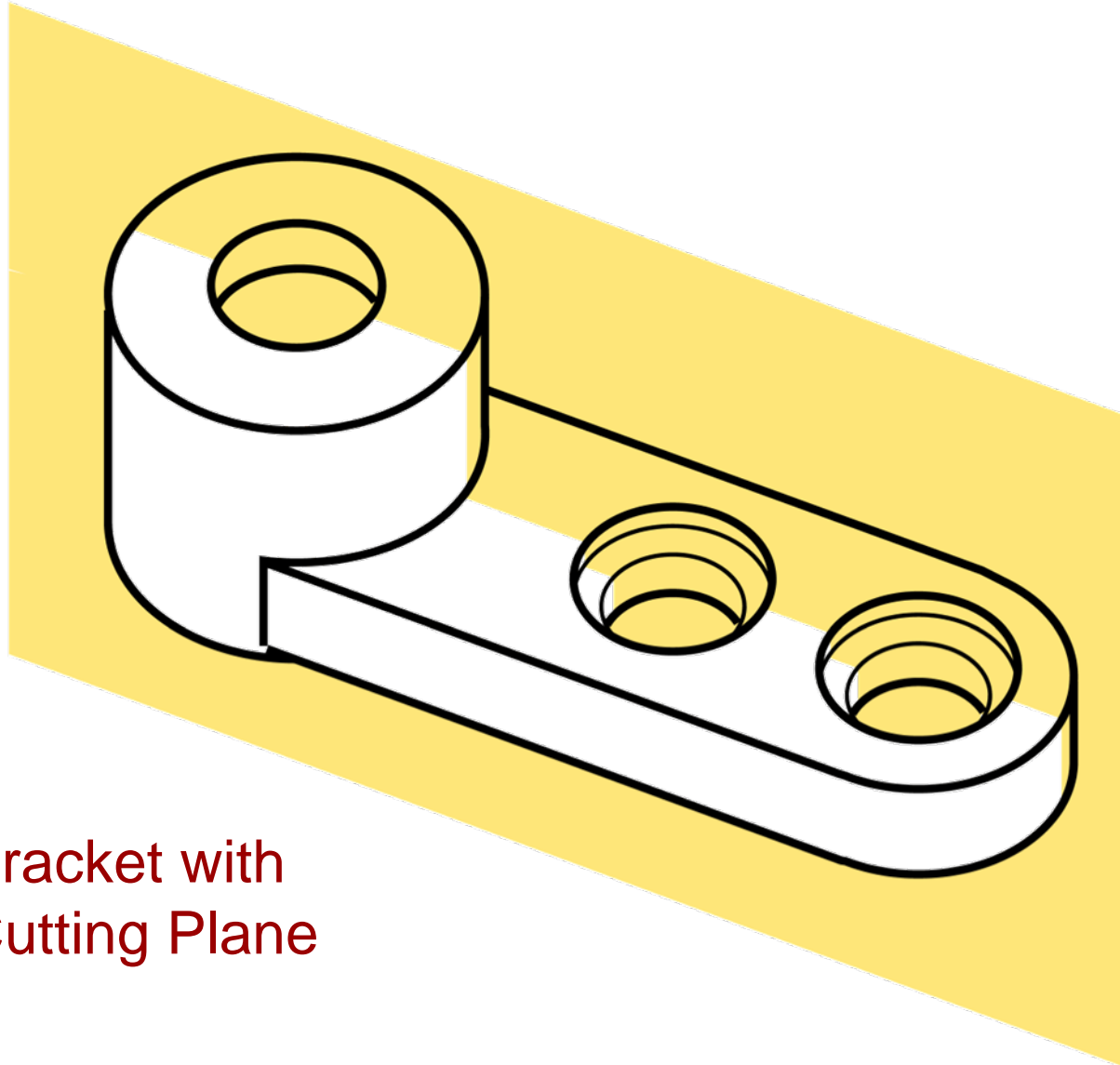


Bracket



# Full Section

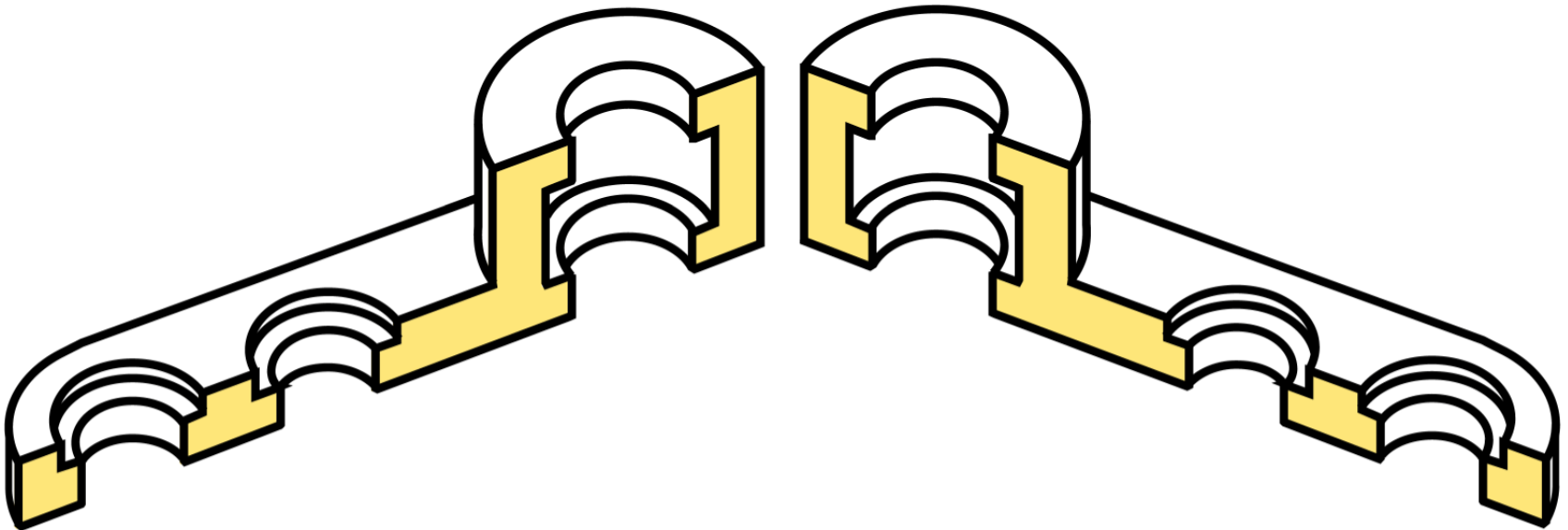
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Bracket with  
Cutting Plane

# Full Section

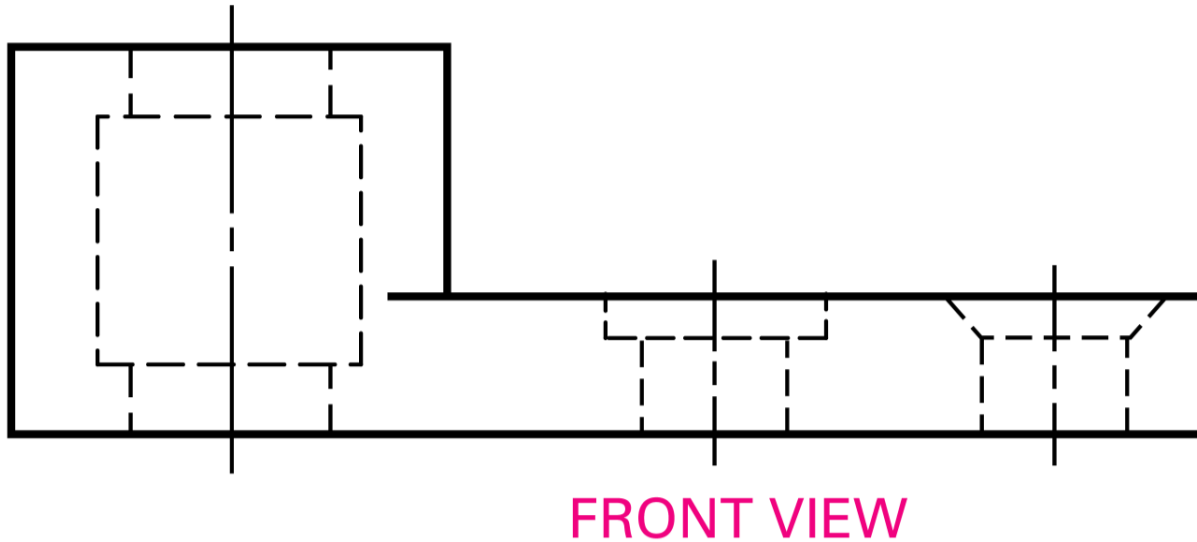
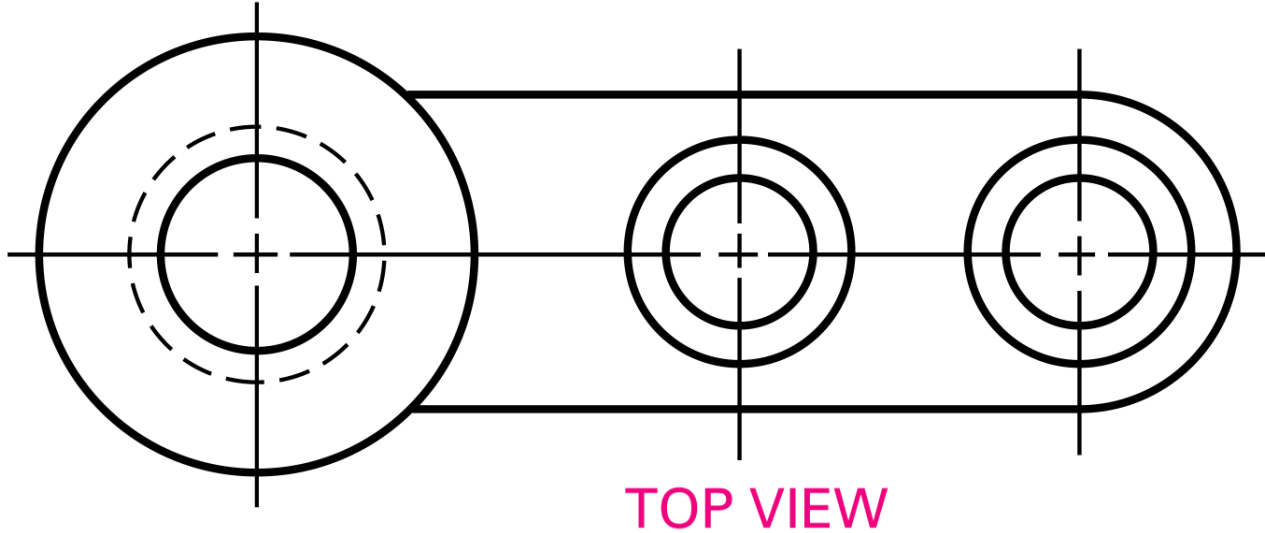
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Front of Bracket Moved Away to  
Expose Front Surface

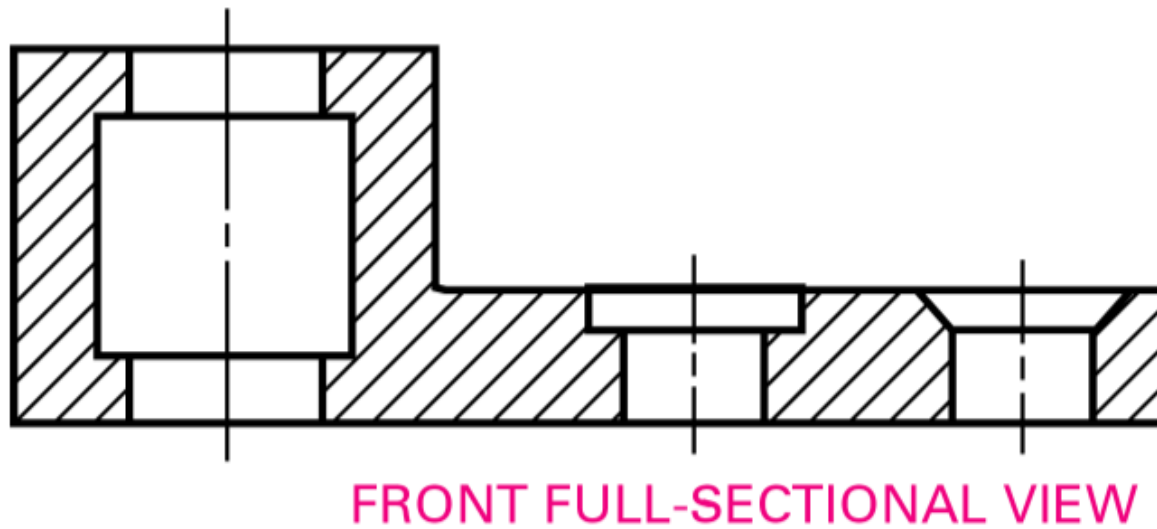
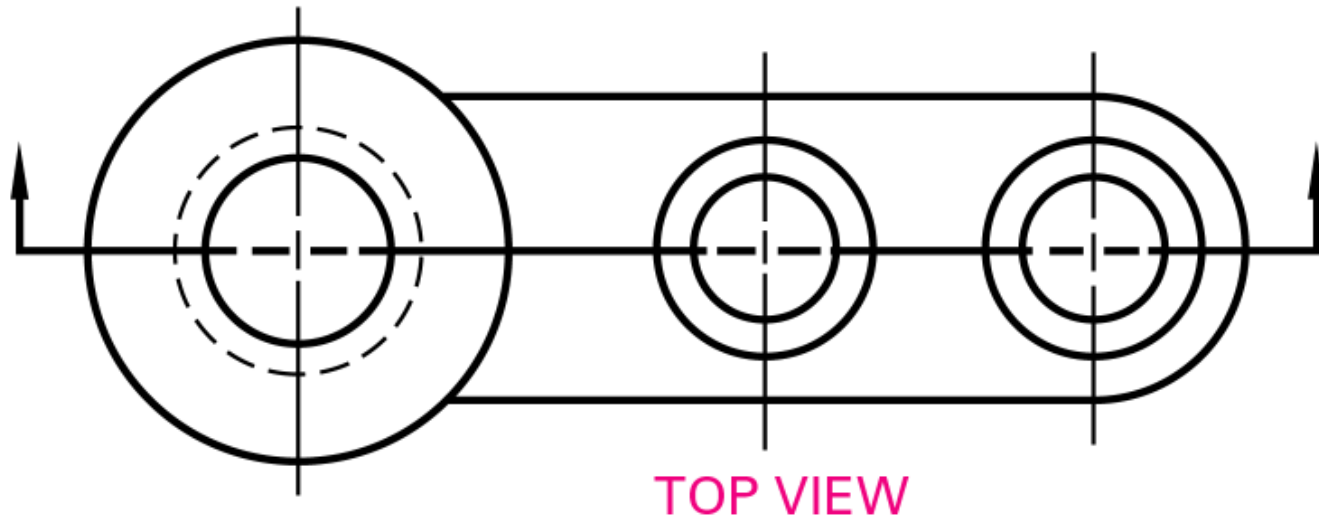
# Full Section (Multiview Drawing)

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# Full Section

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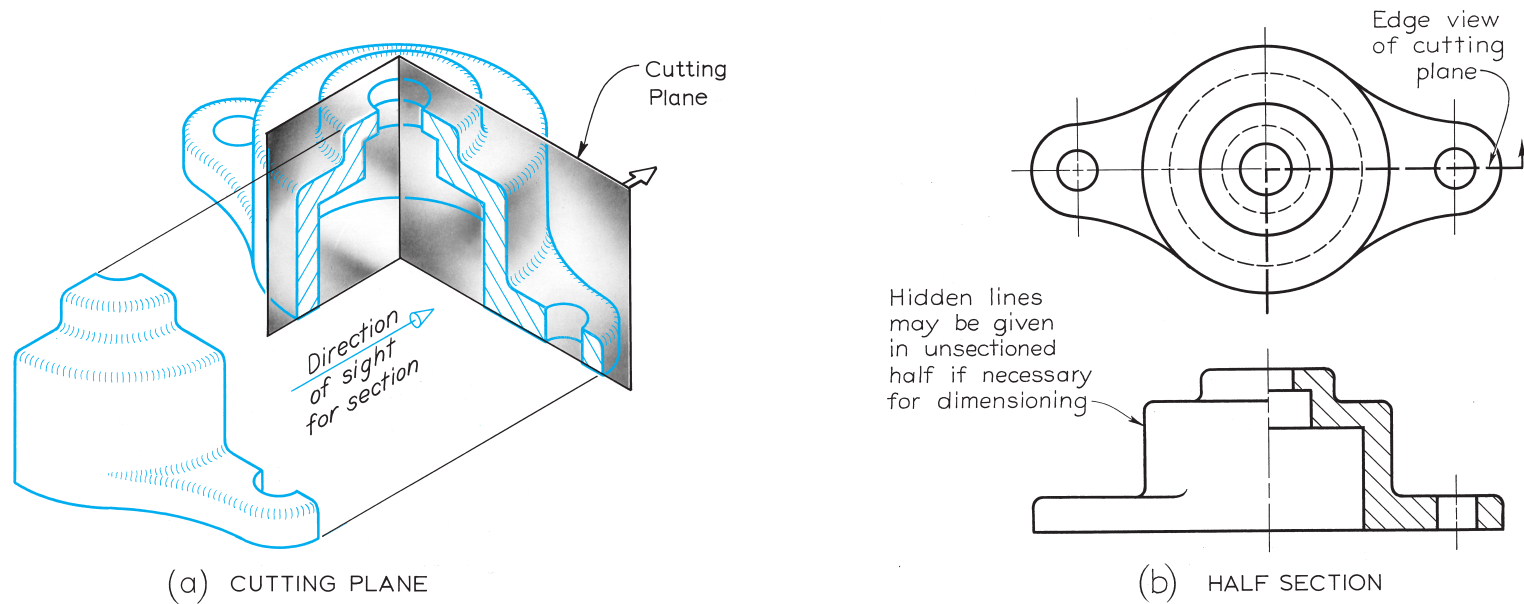
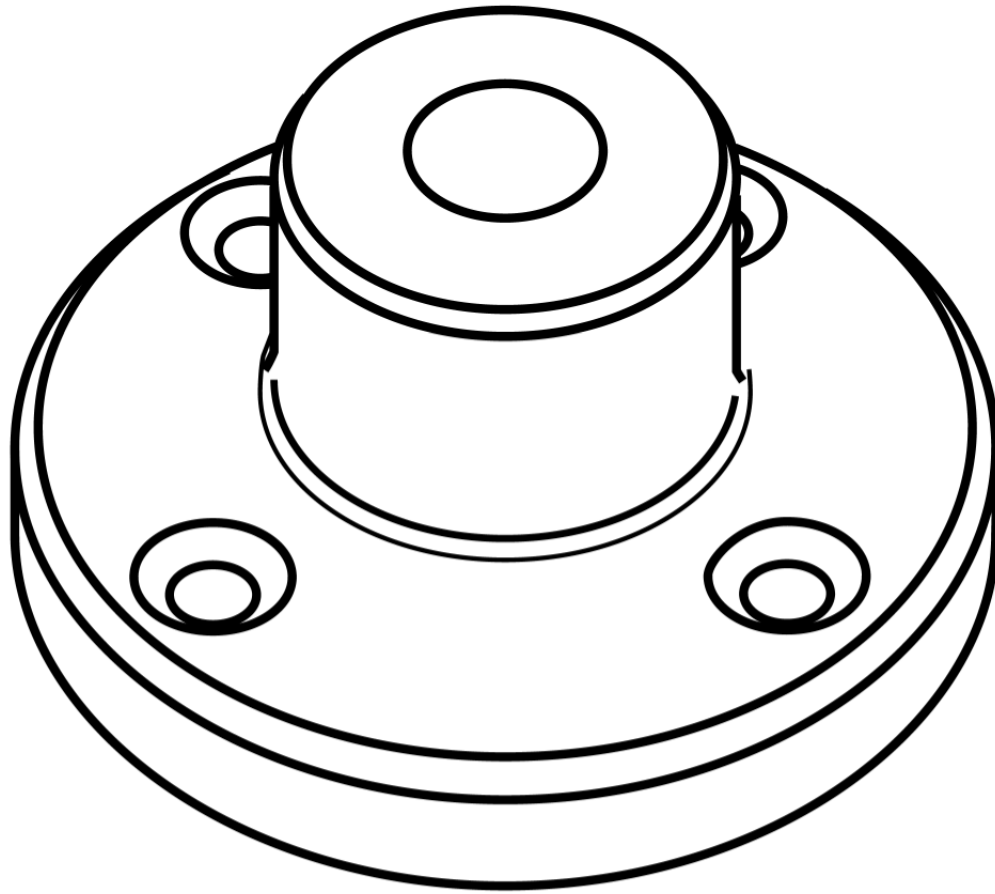


Figure 7-13  
Half Section.

# Half Section

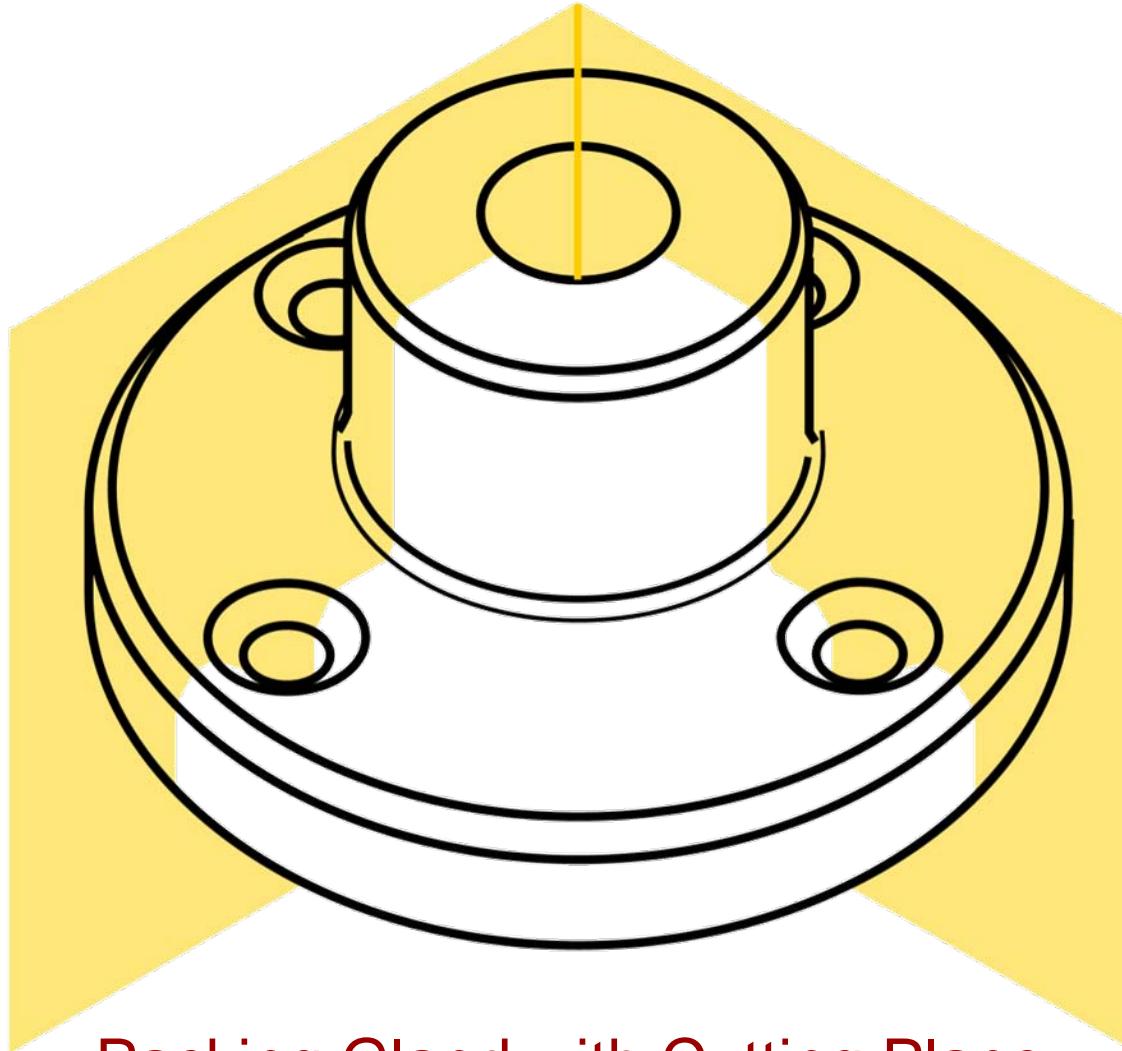
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Packing Gland

# Half Section

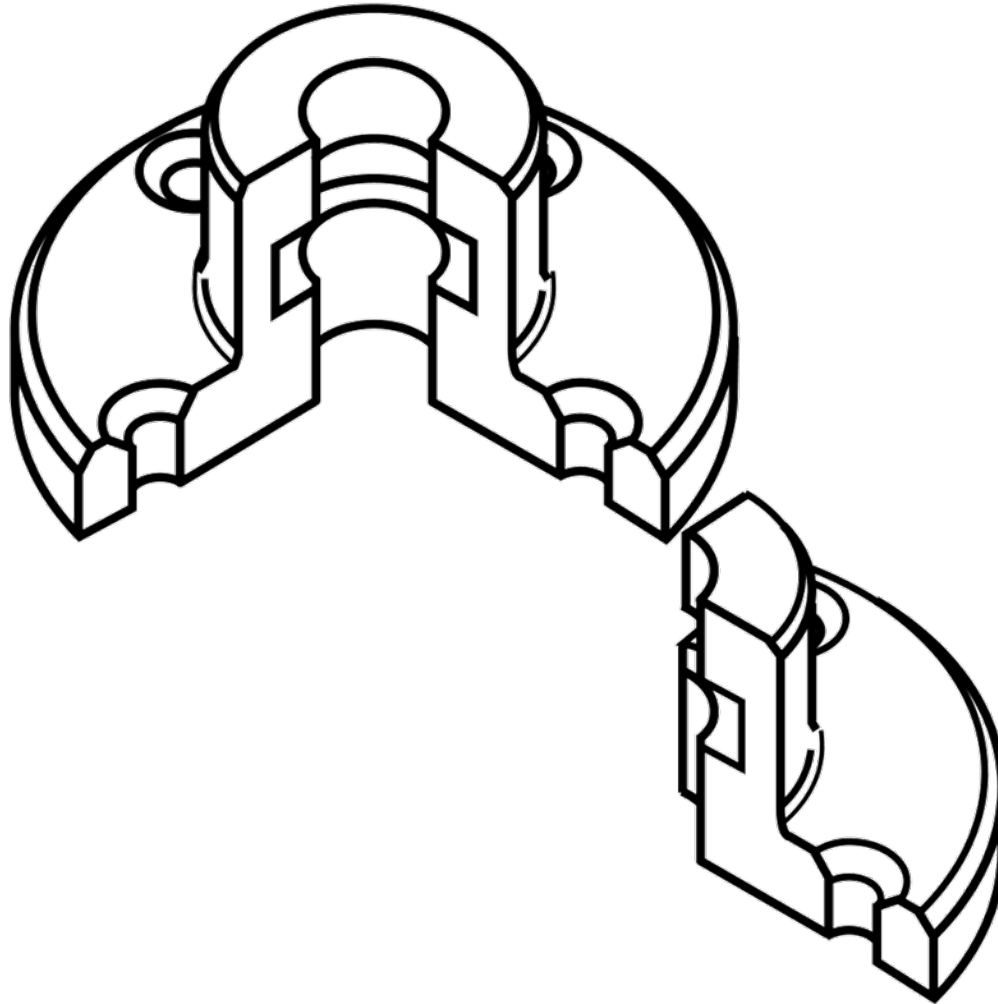
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Packing Gland with Cutting Plane

# Half Section

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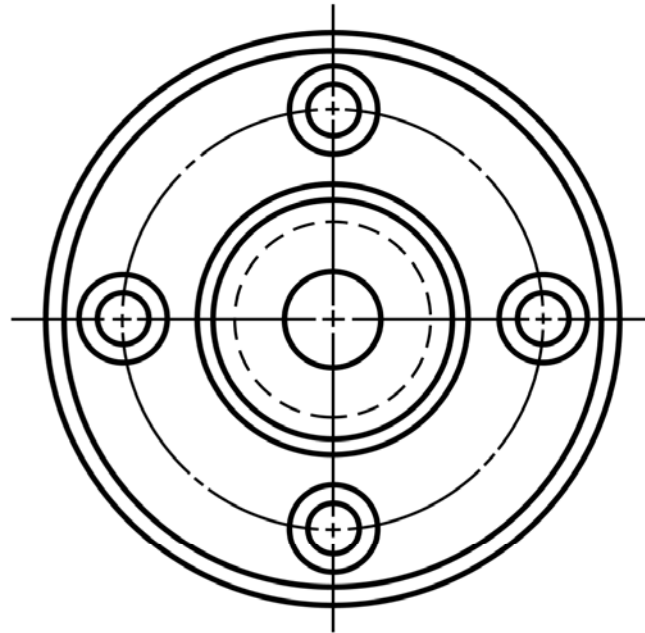


Front of Packing Gland Moved Away to  
Expose Front Surface

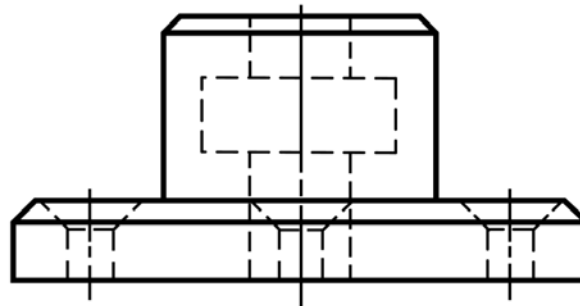


# Half Section (Multiview Drawing)

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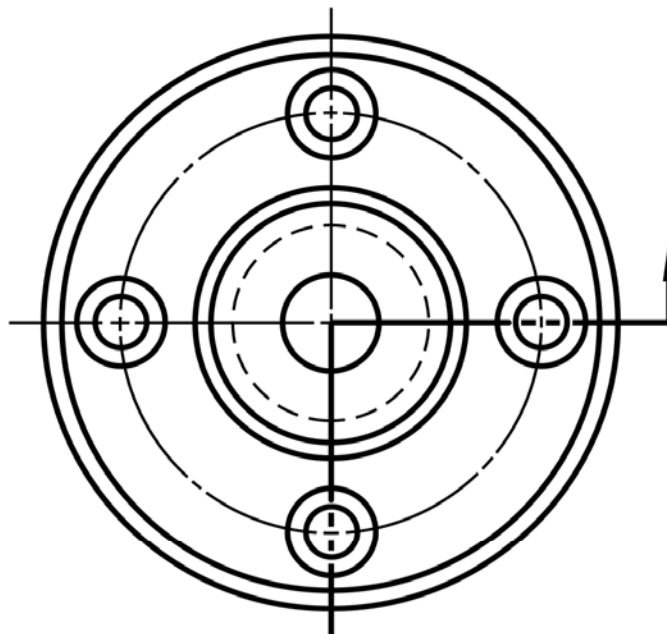
TOP VIEW



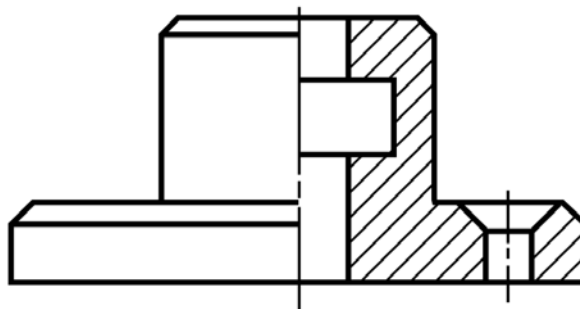
FRONT VIEW

# Half Section

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TOP VIEW



FRONT VIEW

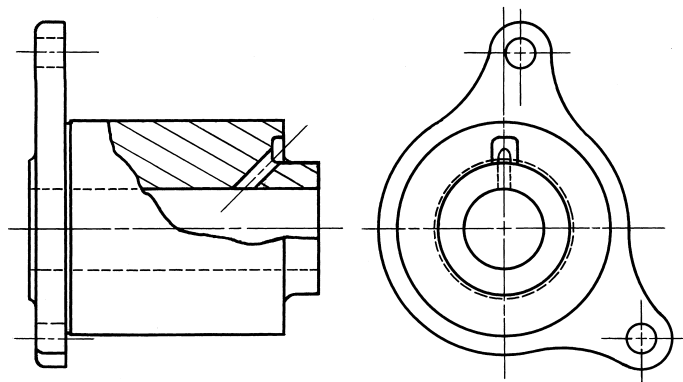
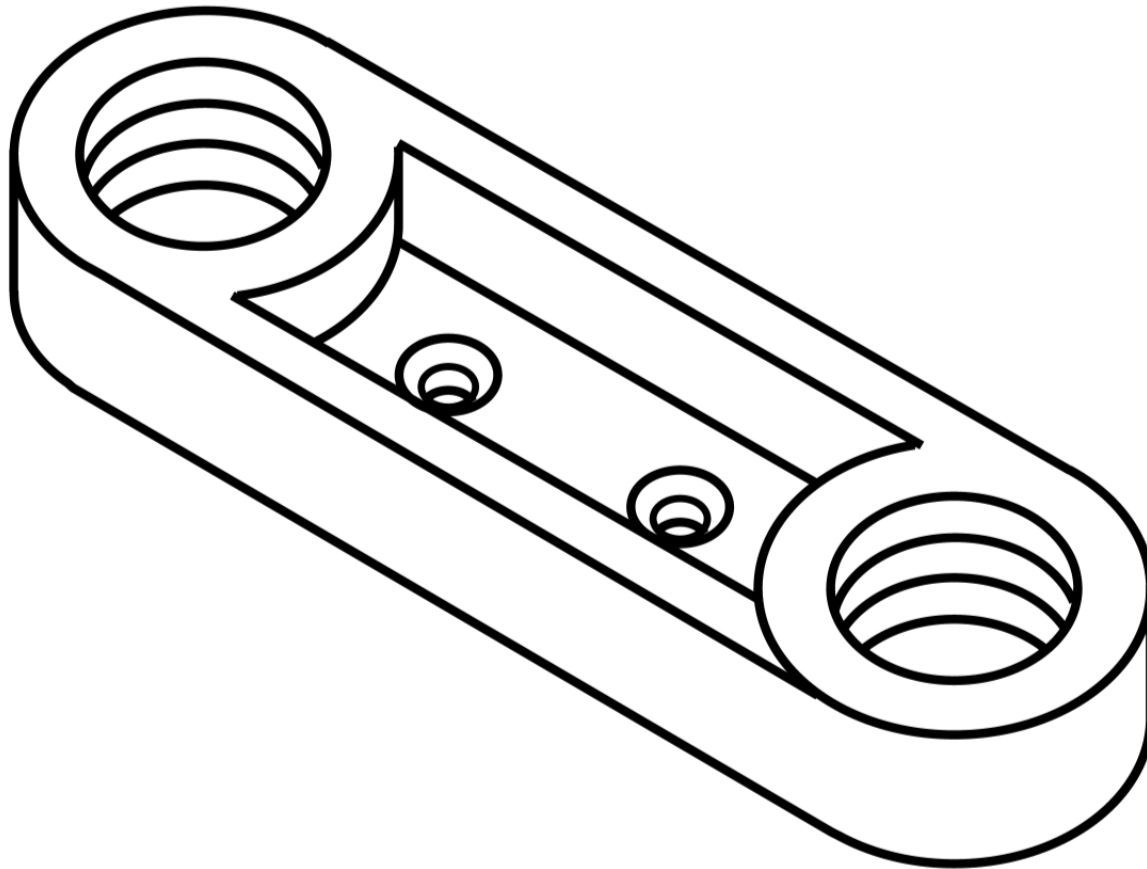


Figure 7-14  
Broken-Out Section.

# Broken-Out Section

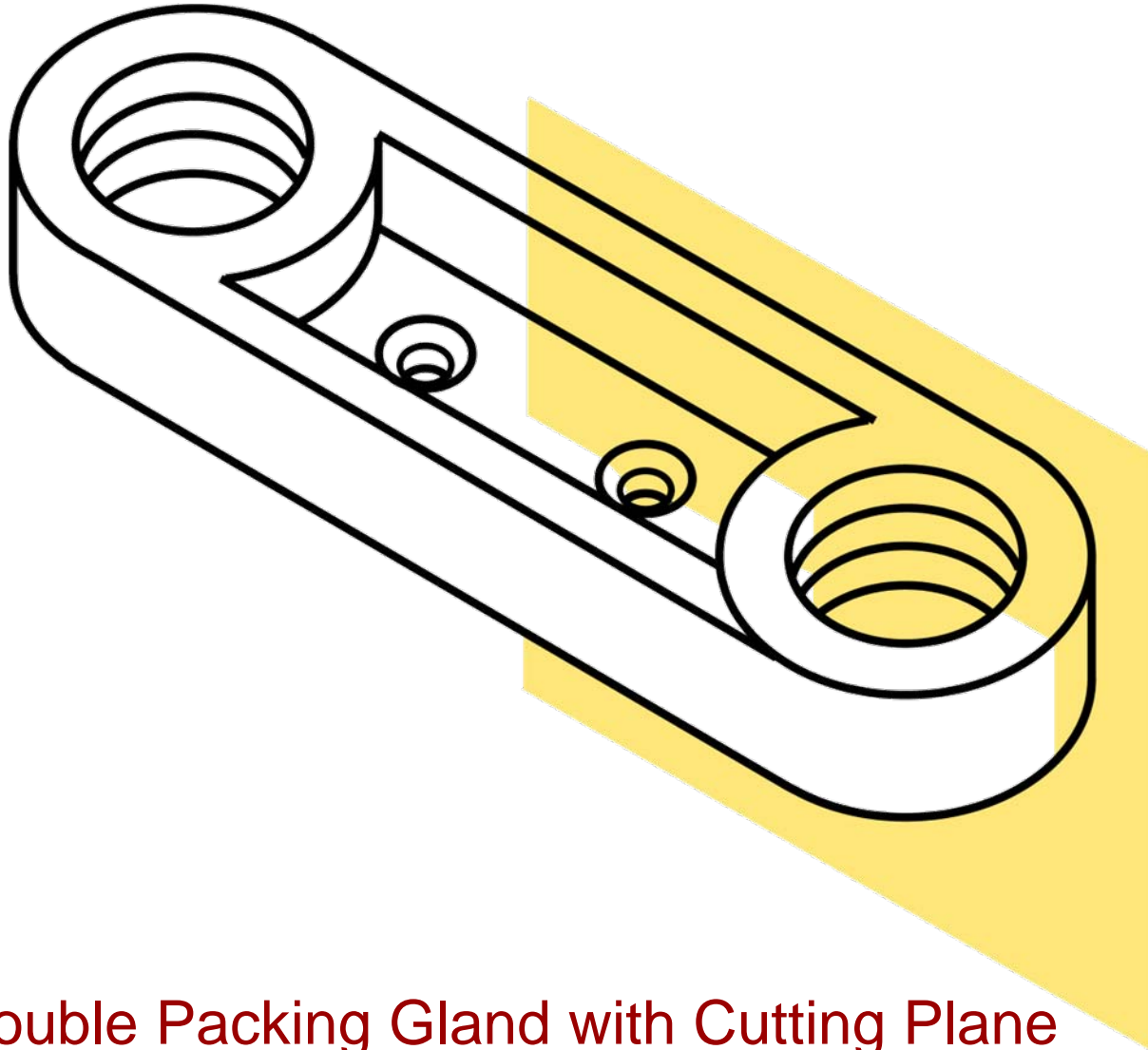
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Double Packing Gland

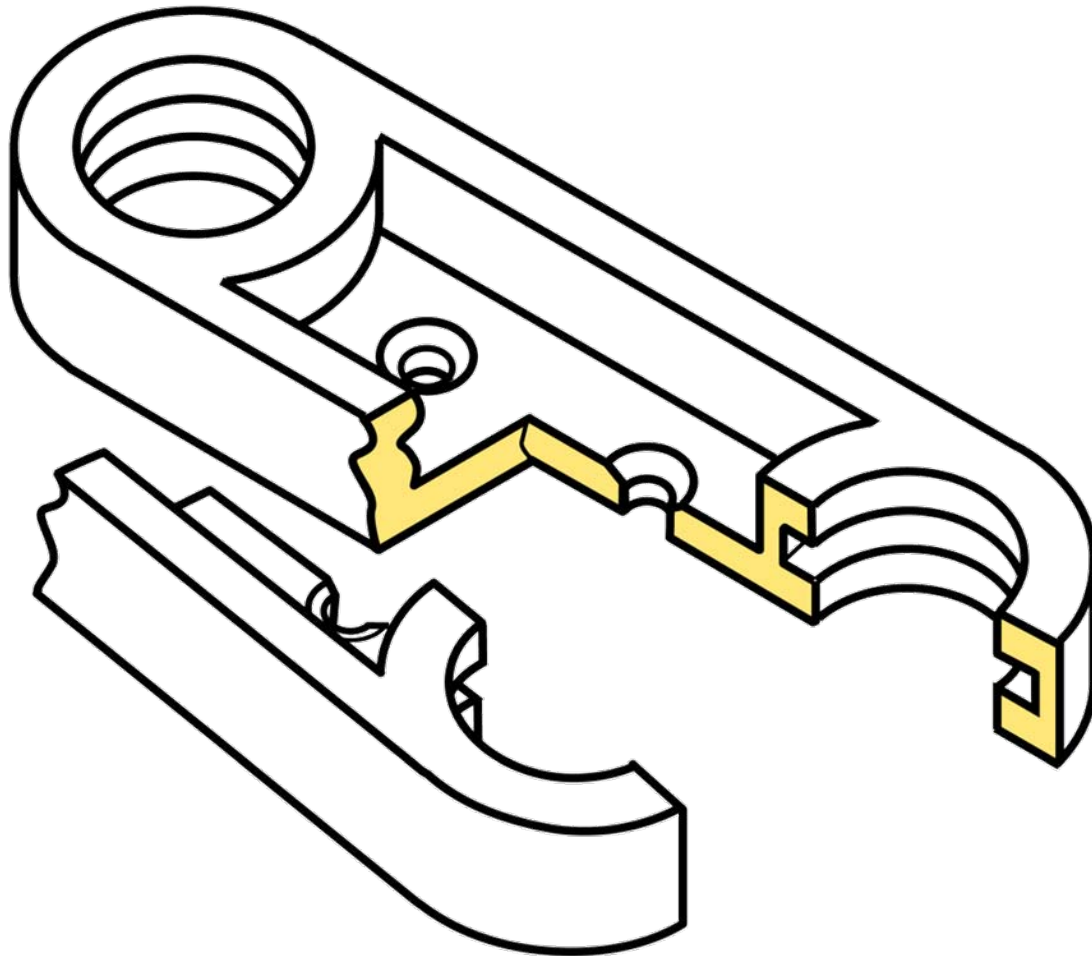
# Broken-Out Section

---



# Broken-Out Section

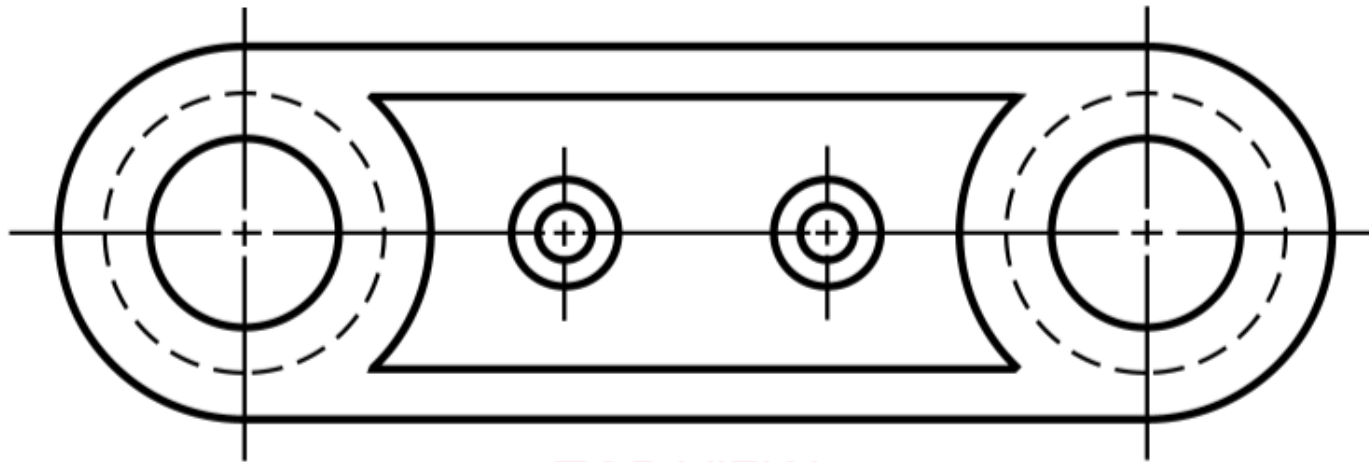
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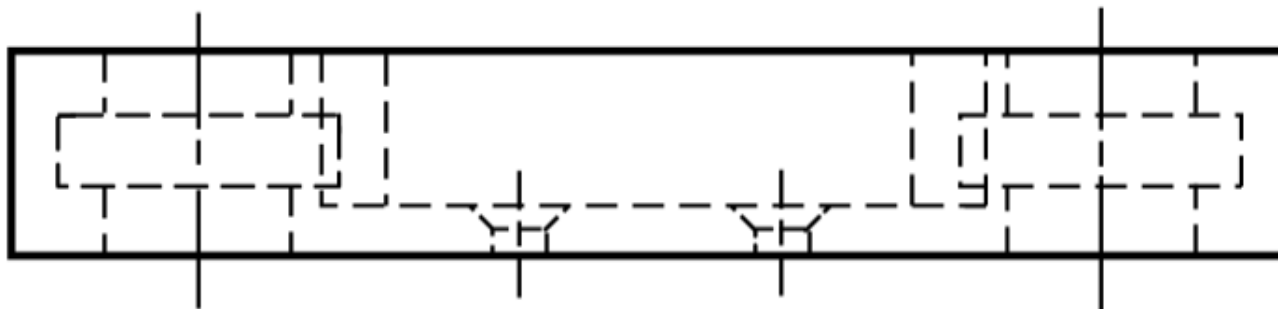
Front of Double Packing Gland Moved Away to  
Expose Cut Surface

# Broken-Out Section (Multiview Drawing)

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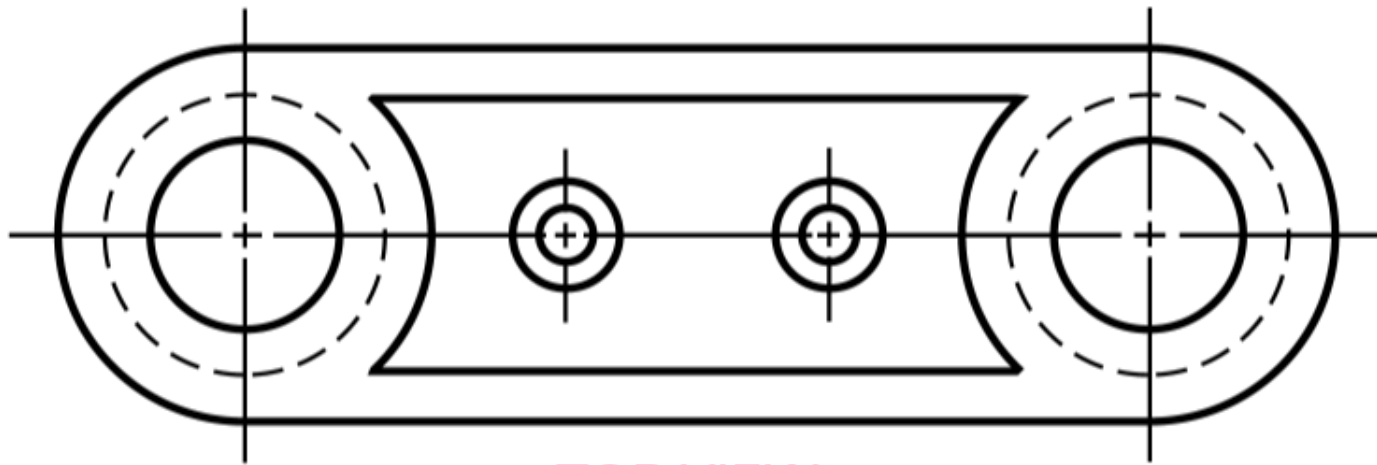
TOP VIEW



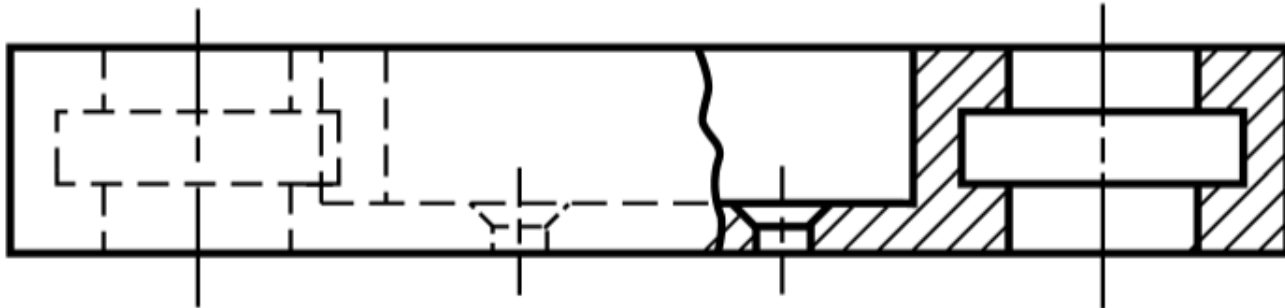
FRONT VIEW

# Broken-Out Section

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TOP VIEW



FRONT VIEW WITH BROKEN-OUT SECTION



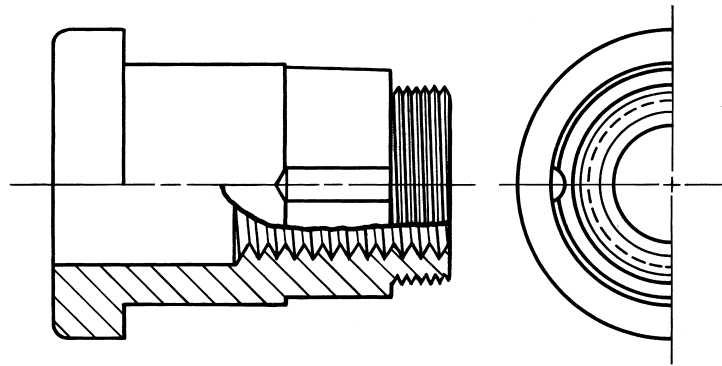


Figure 7-15  
Break Around Keyway.

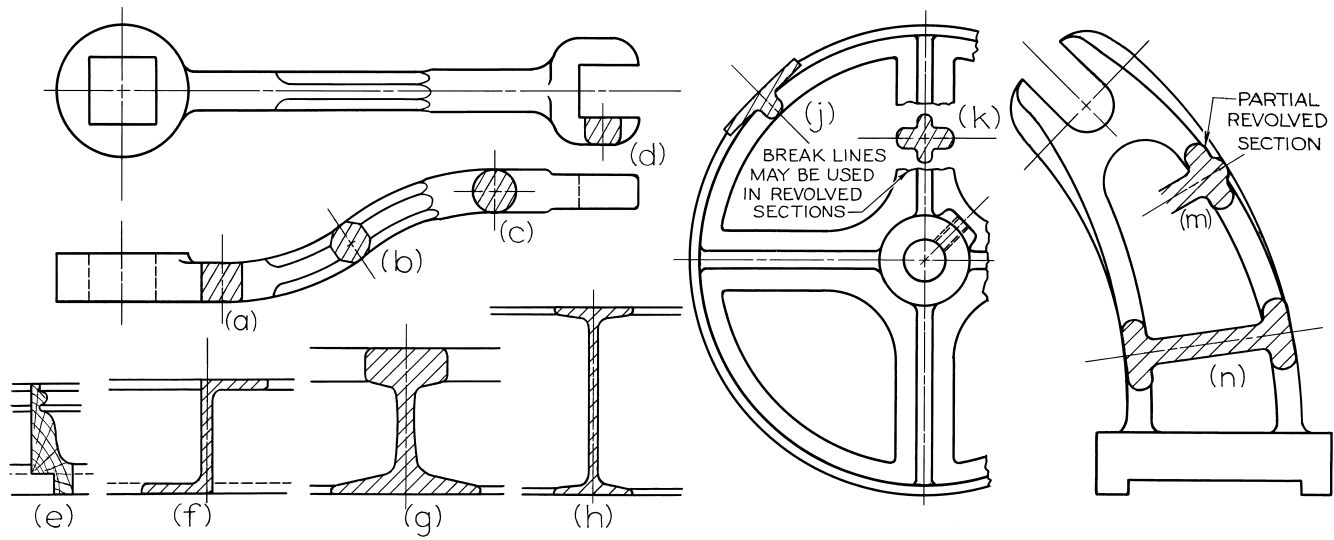
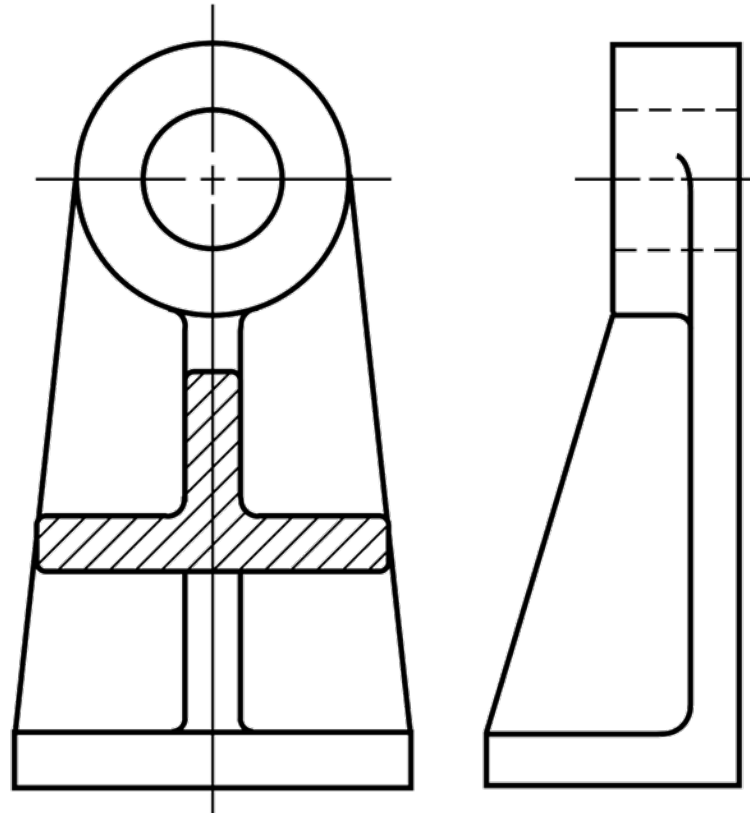
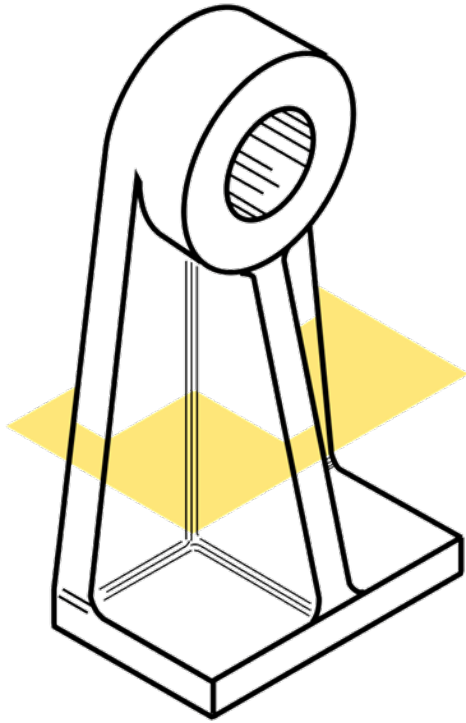


Figure 7-16  
Revolved Sections.

# Revolved Section

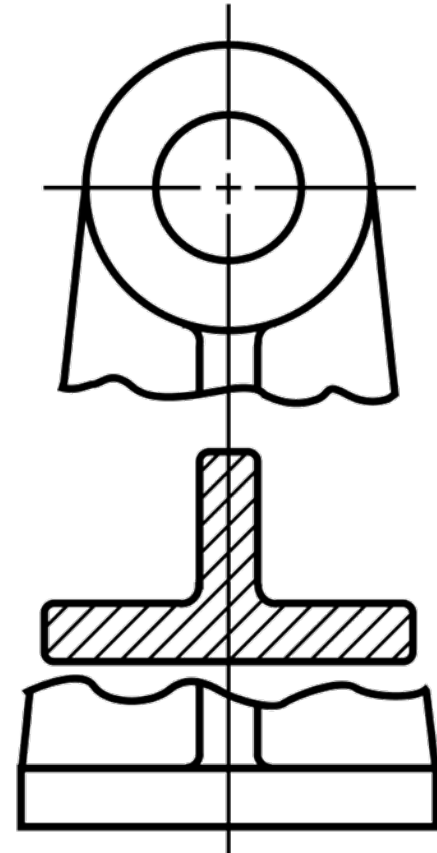
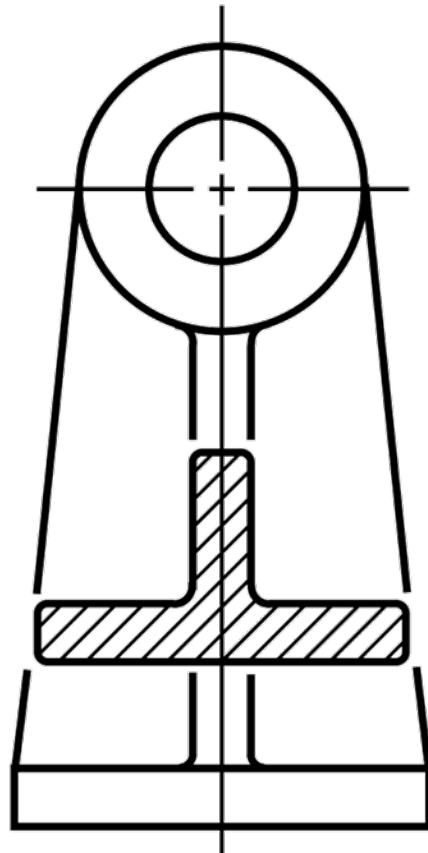
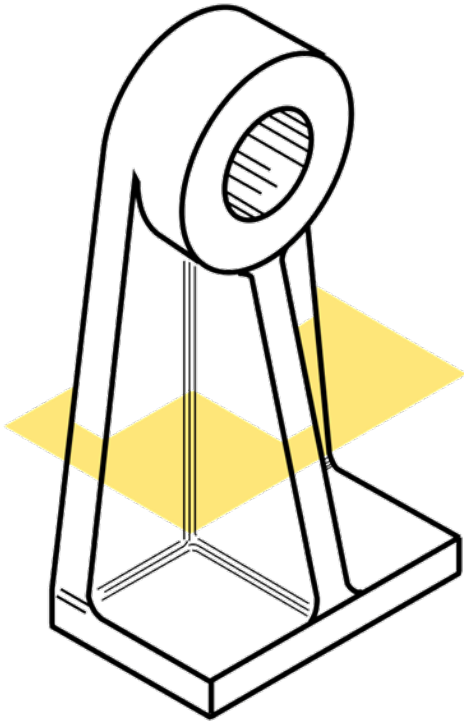
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Most Common Method

# Revolved Section

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Other Acceptable Methods

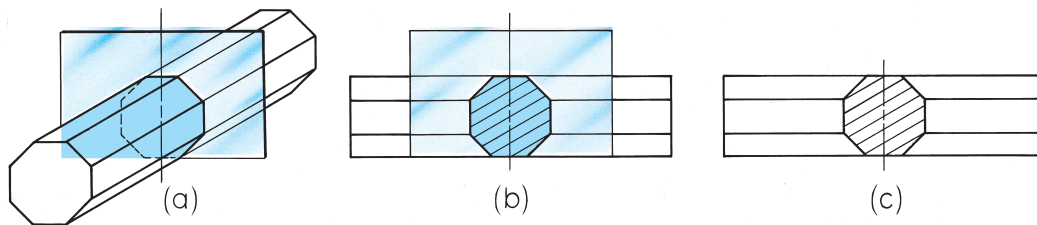


Figure 7-17  
Use of the Cutting Plane in Revolved Sections.

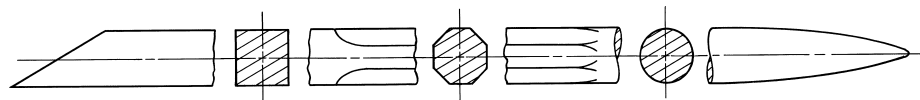


Figure 7-18  
Conventional Breaks Used with Revolved Sections.

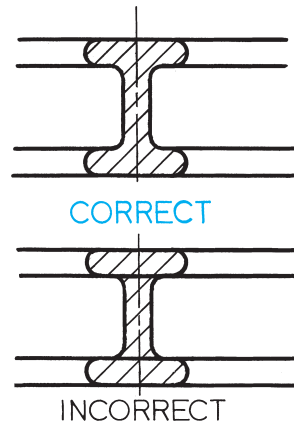


Figure 7-19

A Common Error in Drawing Revolved Sections.

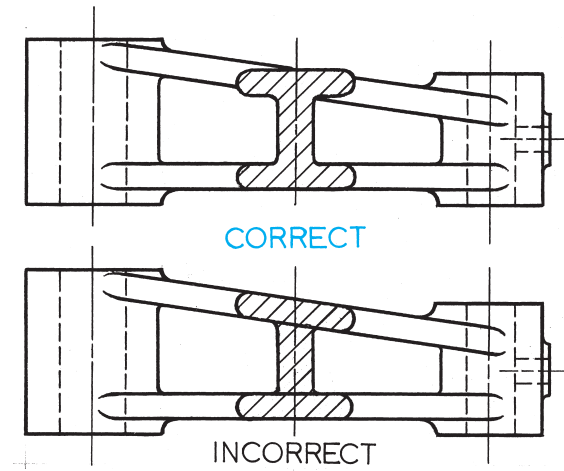


Figure 7-20  
A Common Error in Drawing Revolved Sections.



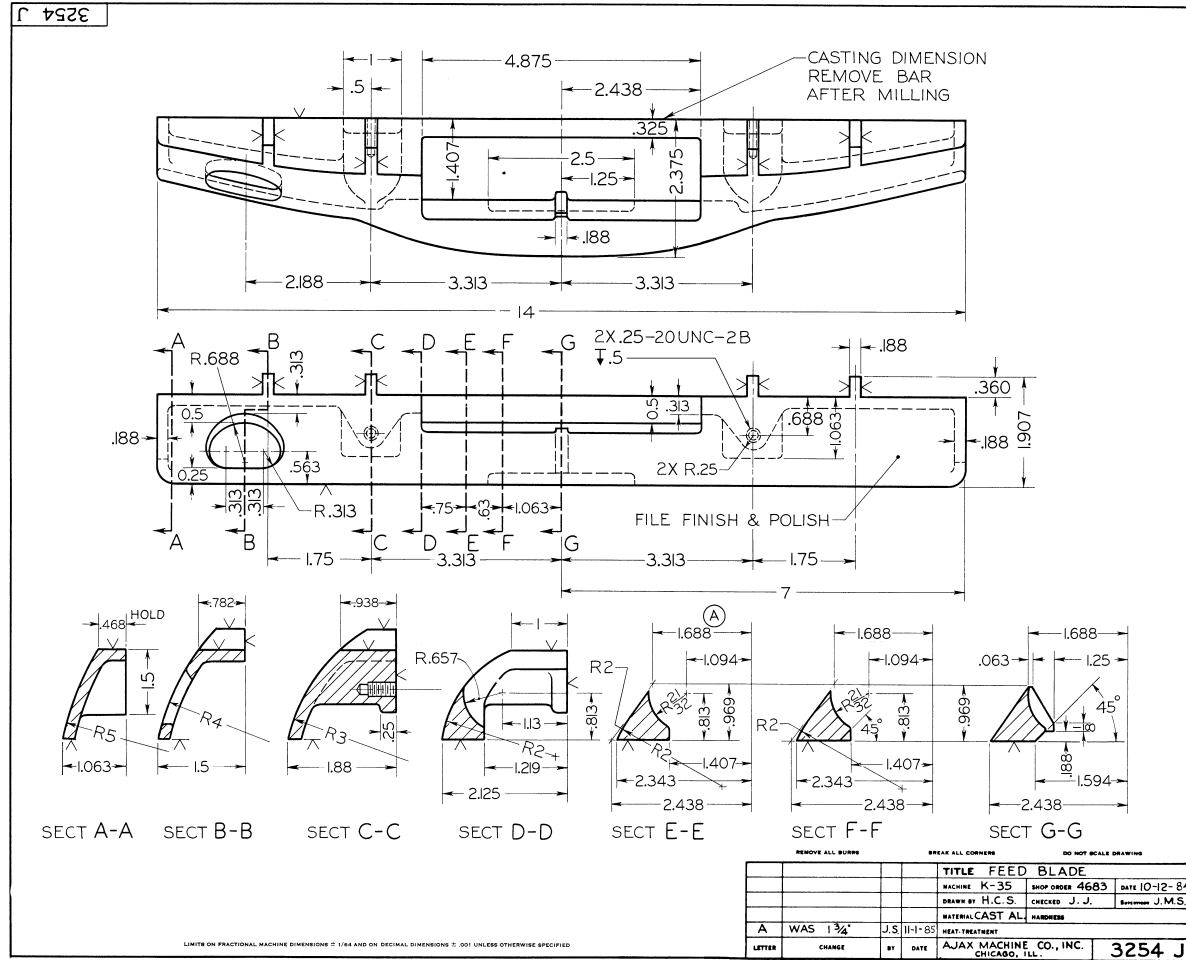


Figure 7-21  
Removed Sections.

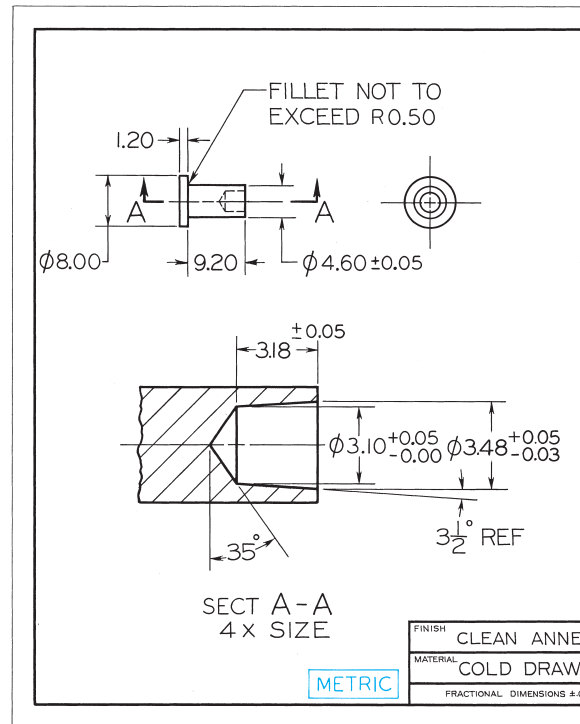


Figure 7-22  
Removed Section.

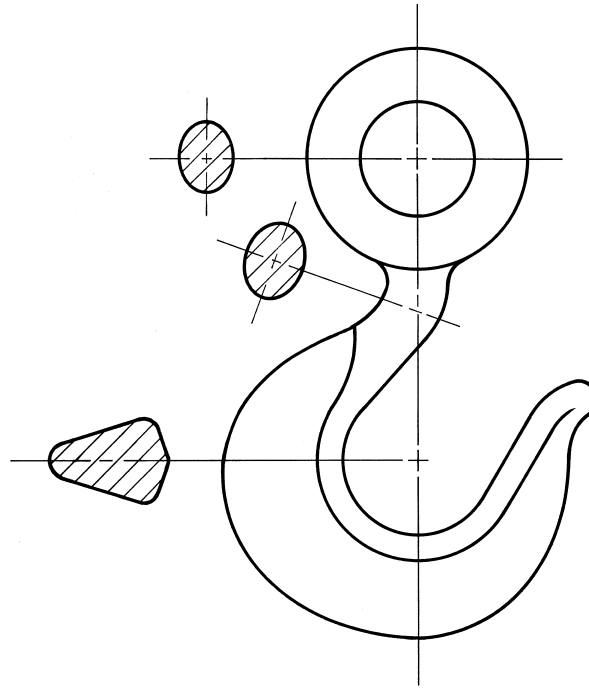
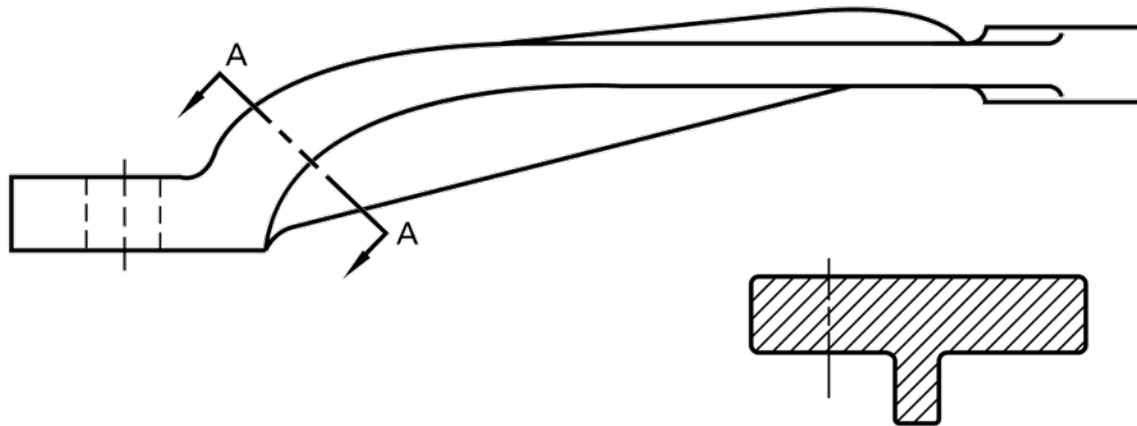
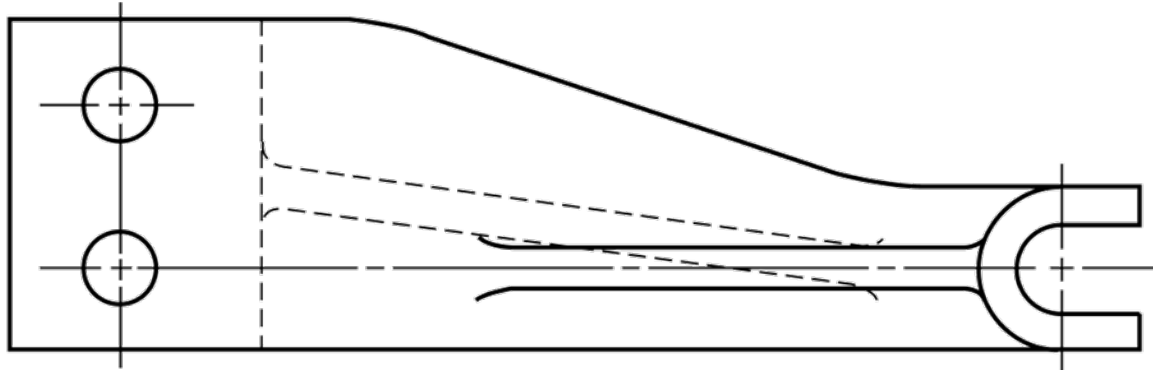


Figure 7-23  
Removed Sections.

# Removed Sections

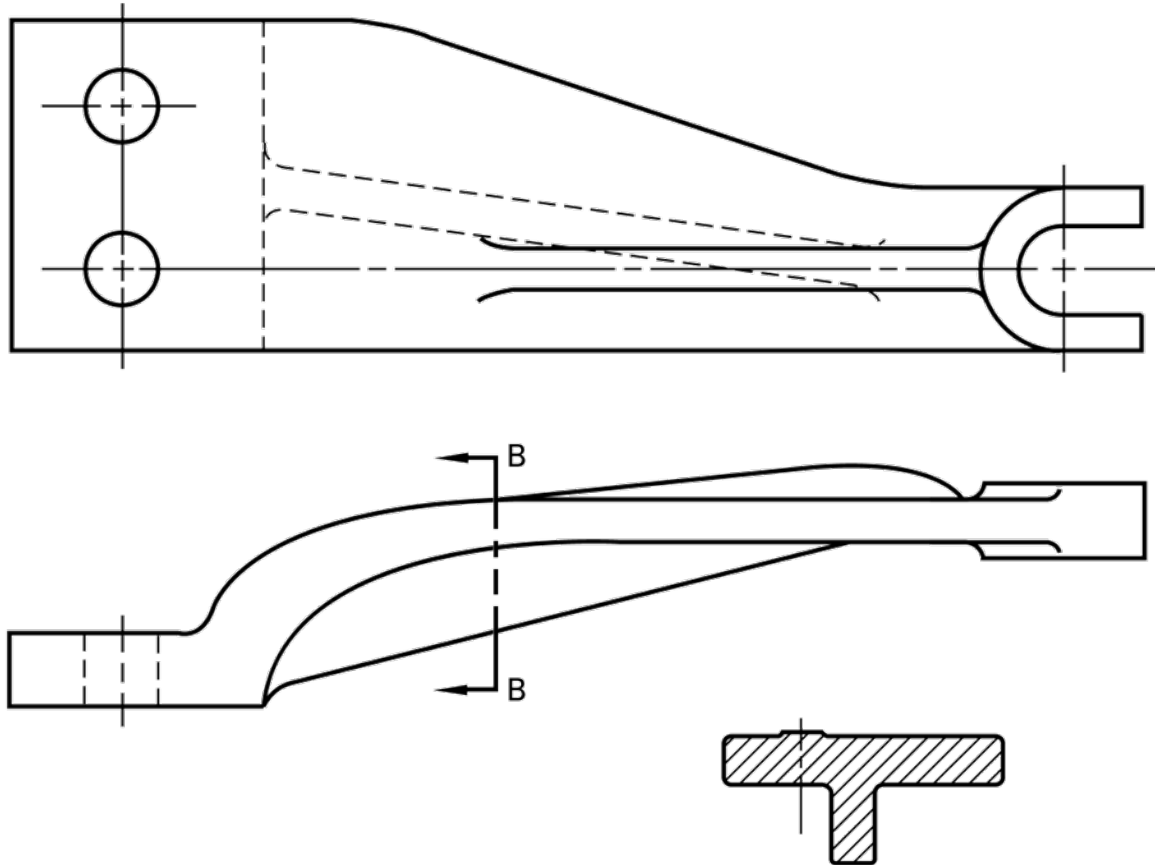
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Section A-A

# Removed Sections

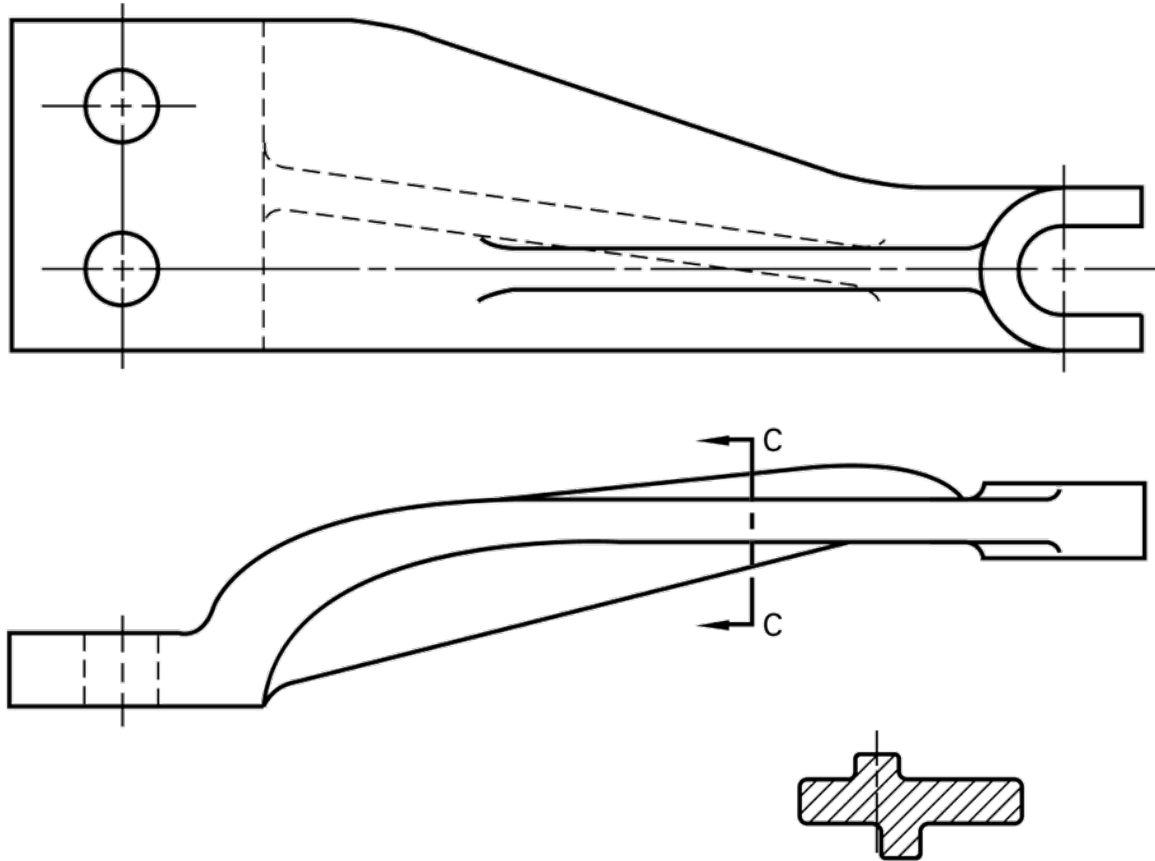
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Section B-B

# Removed Sections

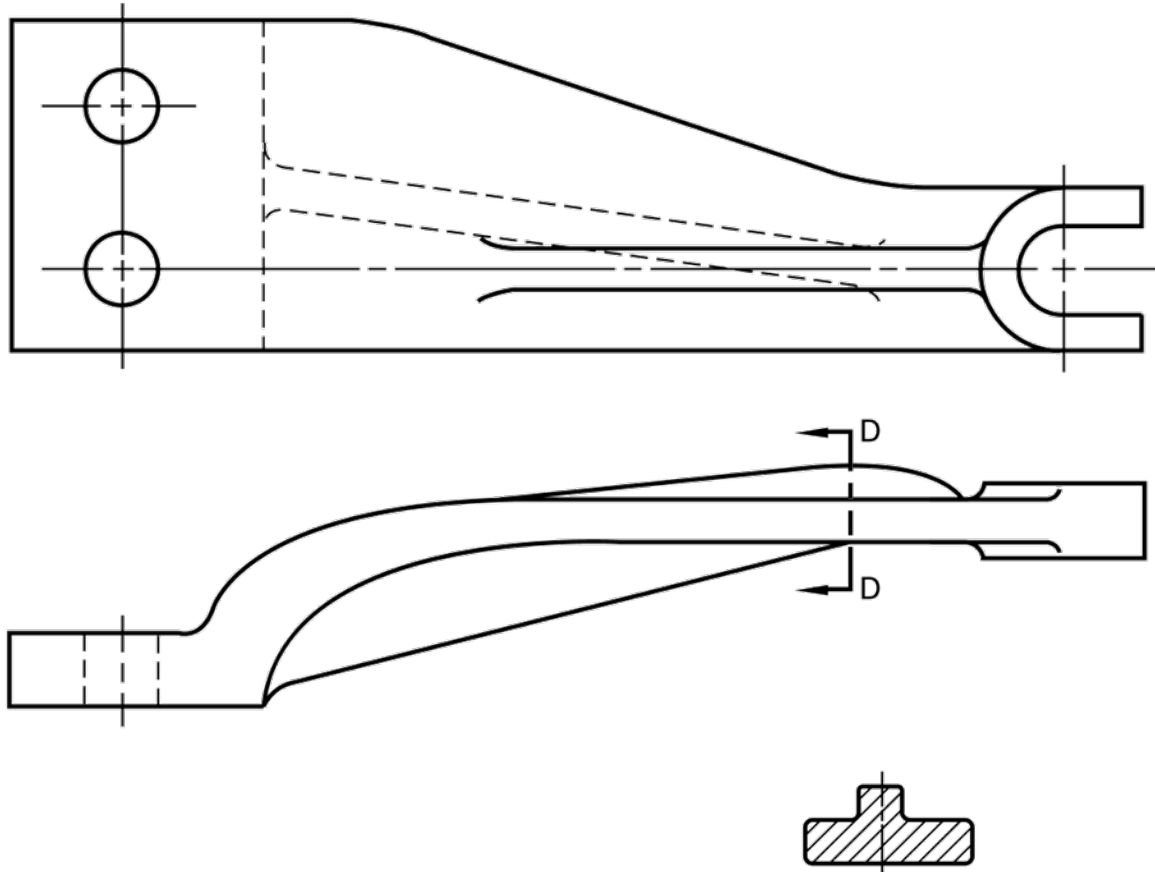
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Section C-C

# Removed Sections

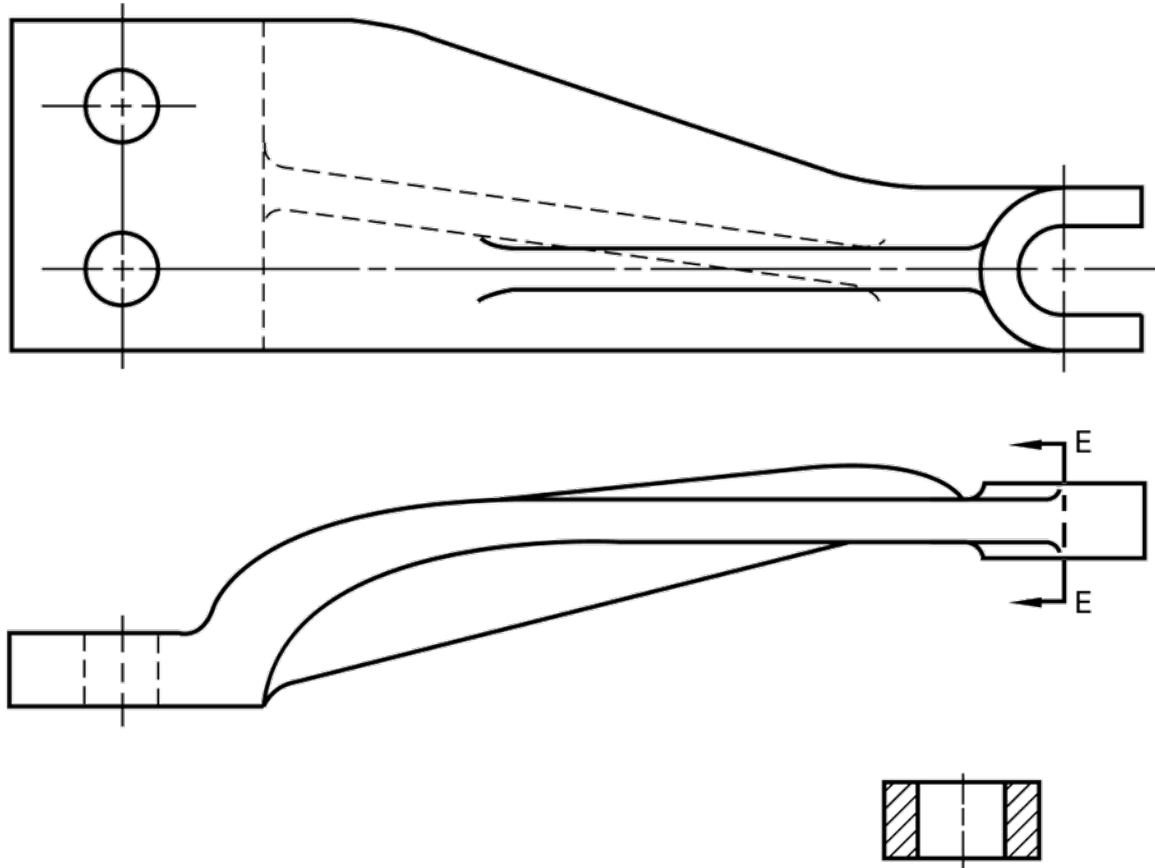
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Section D-D

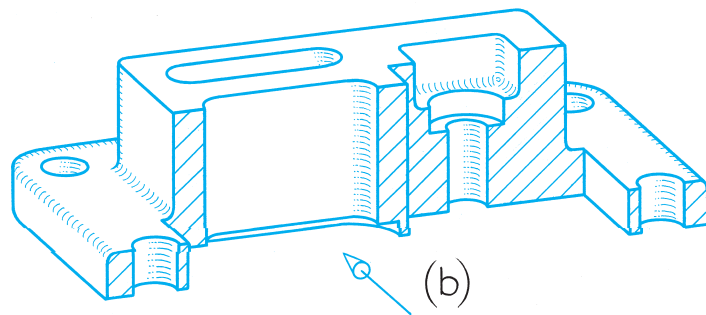
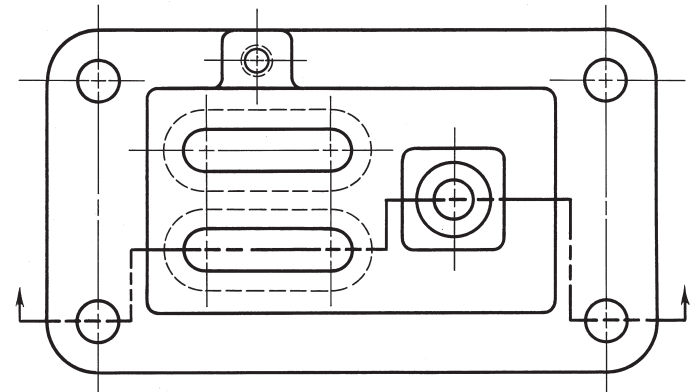
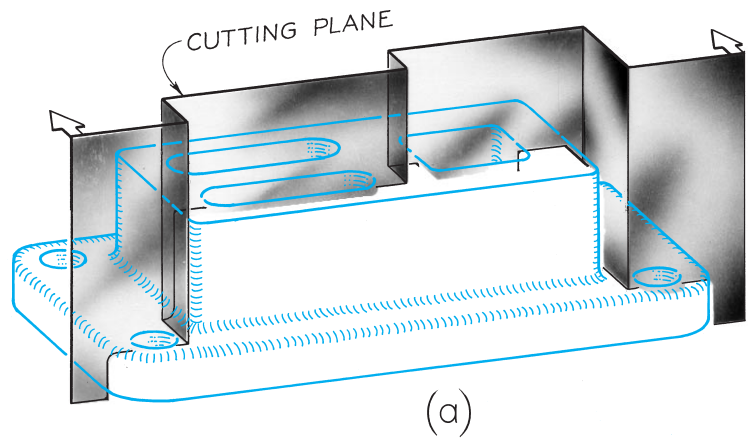
# Removed Sections

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Section E-E





*Do not show  
bends of the  
cutting plane*

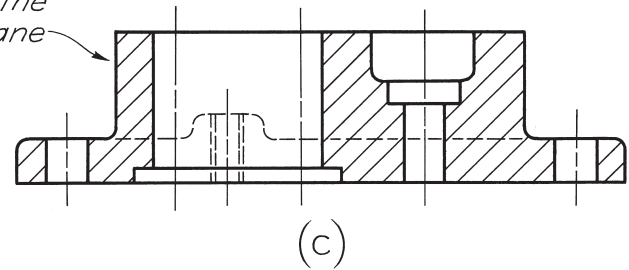
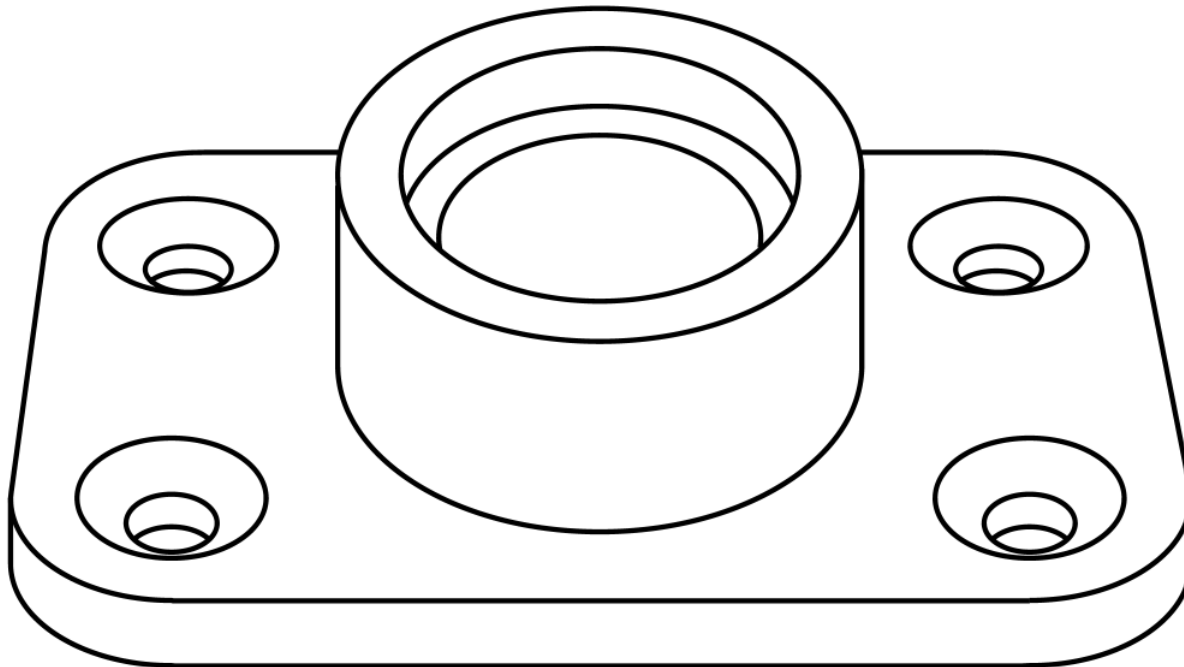


Figure 7-24  
Offset Section.

# Offset Section

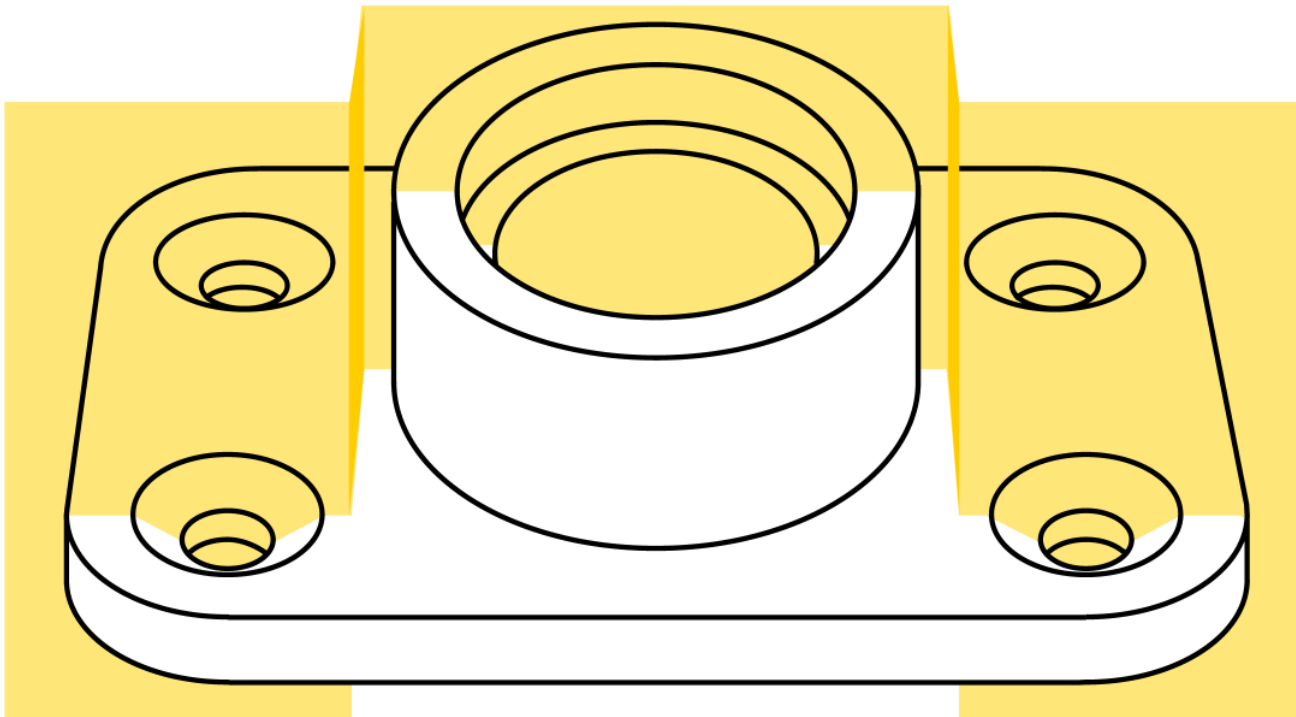
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Bearing Flange

# Offset Section

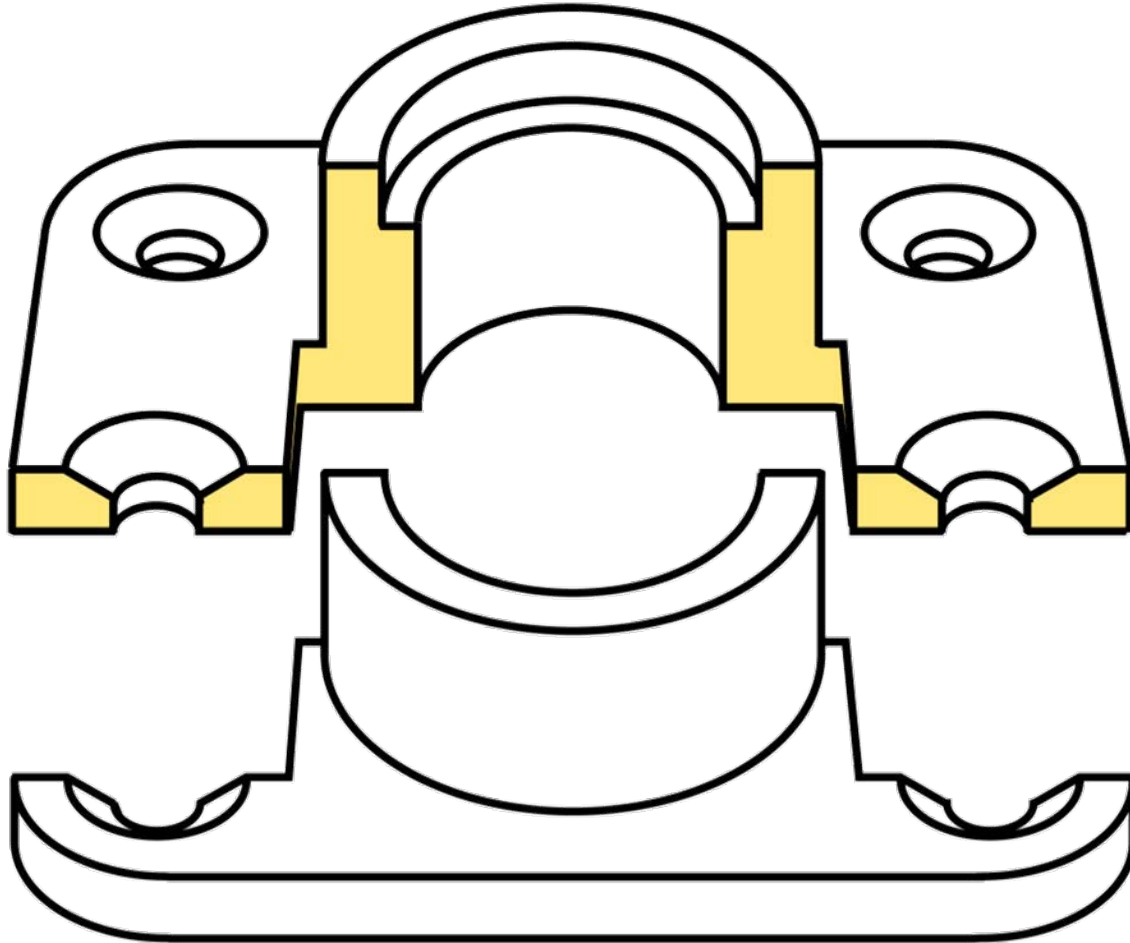
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Bearing Flange with Cutting Plane

# Offset Section

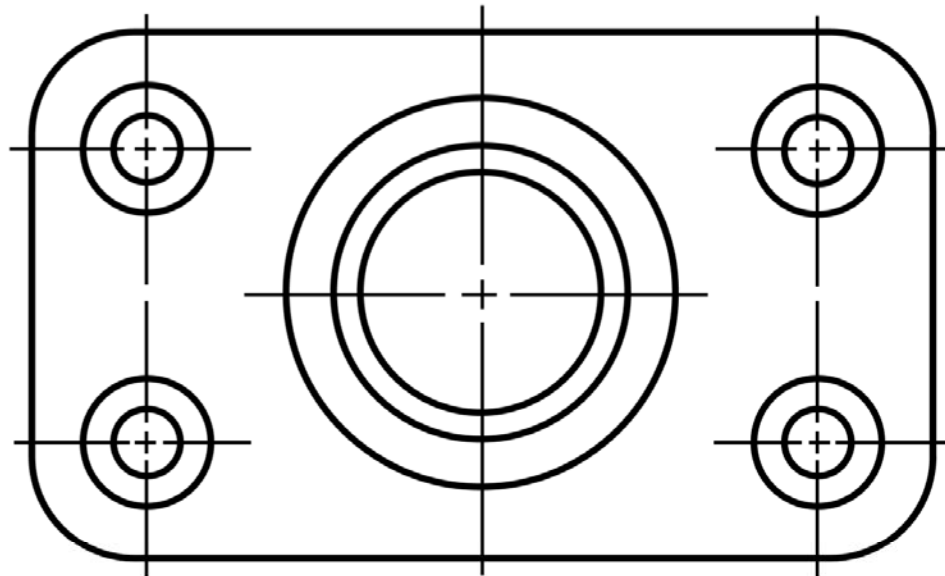
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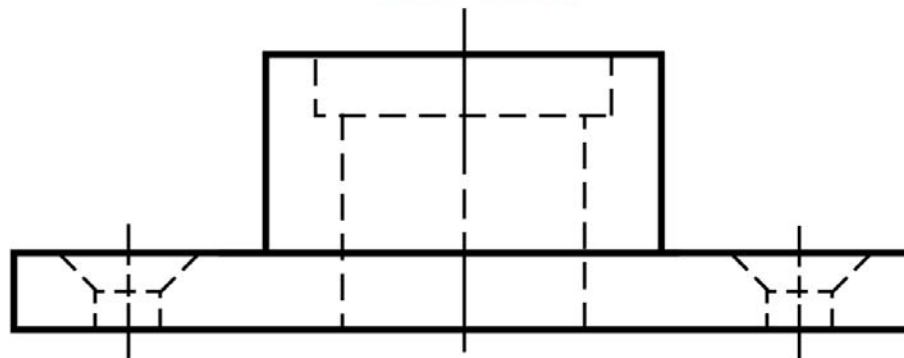
Front of Bearing Flange Moved Away to  
Expose Front Surface

# Offset Section (Multiview Drawing)

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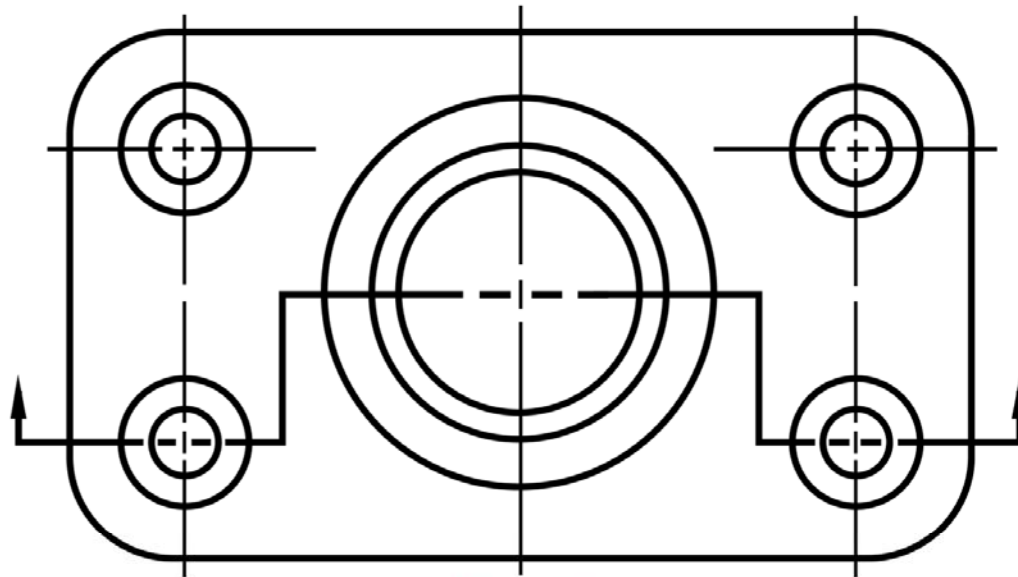
TOP VIEW



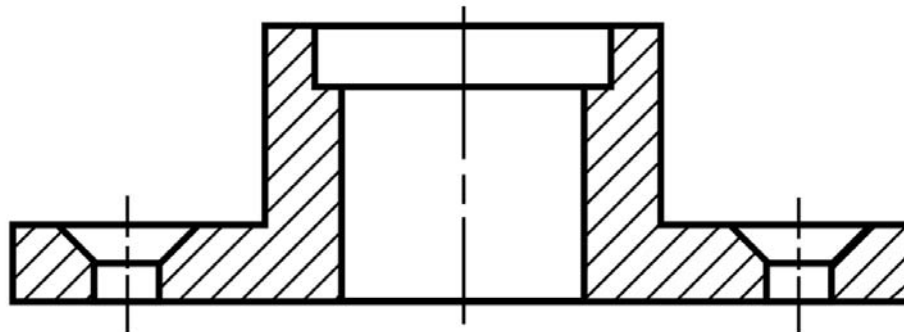
FRONT VIEW

# Offset Section

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TOP VIEW



OFFSET-SECTIONAL VIEW

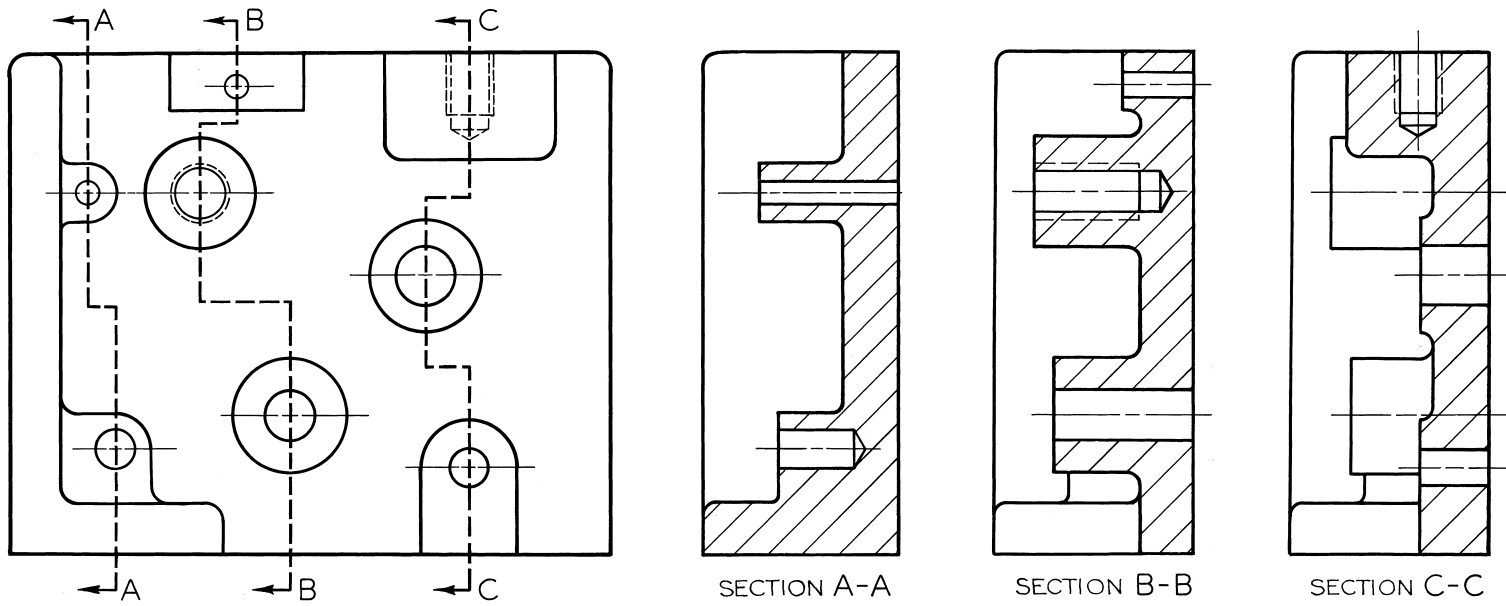


Figure 7-25  
Three Offset Sections.

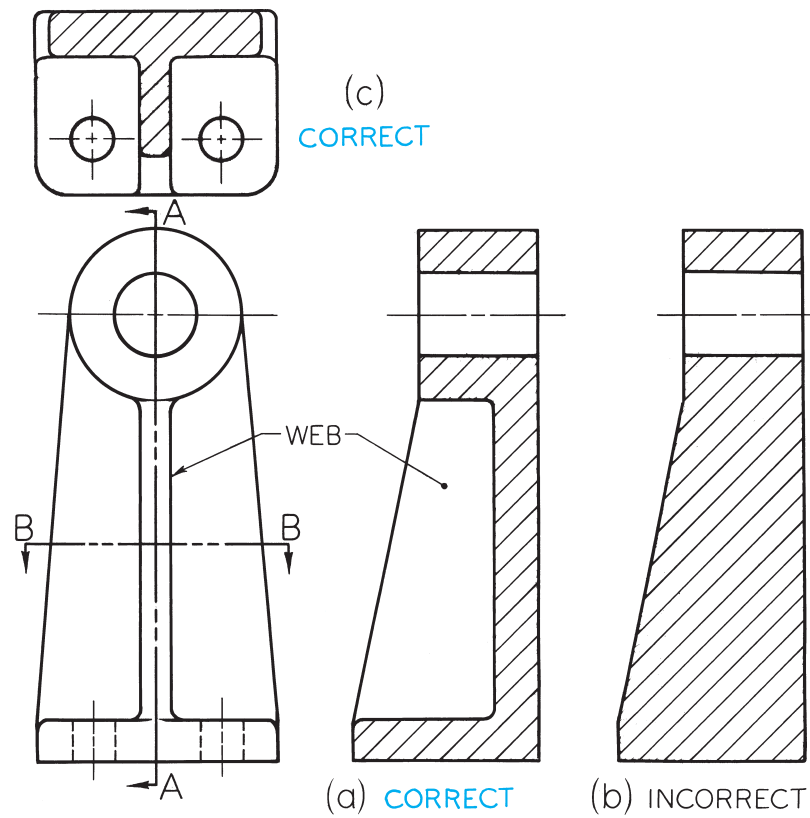
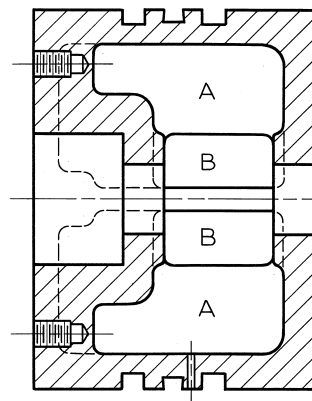
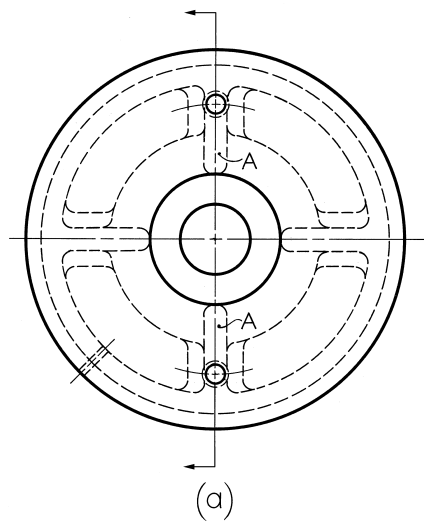


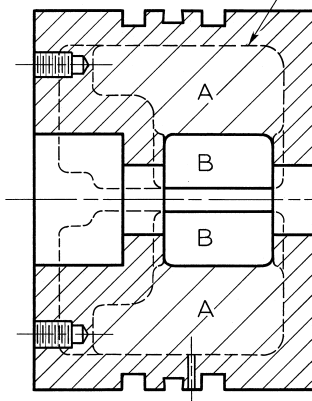
Figure 7-26  
Webs in Section.





(b) RIBS NOT  
SECTION-LINED

*Note use of hidden line*



(c) ALTERNATE  
SECTION-LINING

Figure 7-27  
Alternate Section Lining.

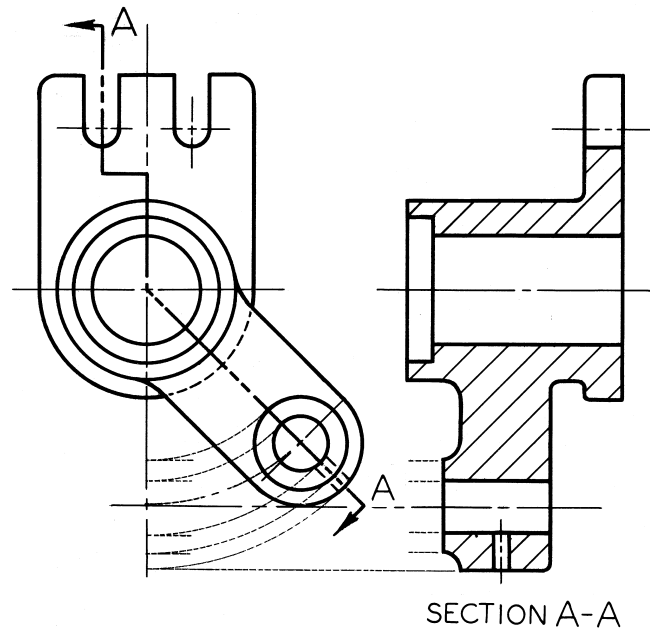


Figure 7-28  
Aligned Section.

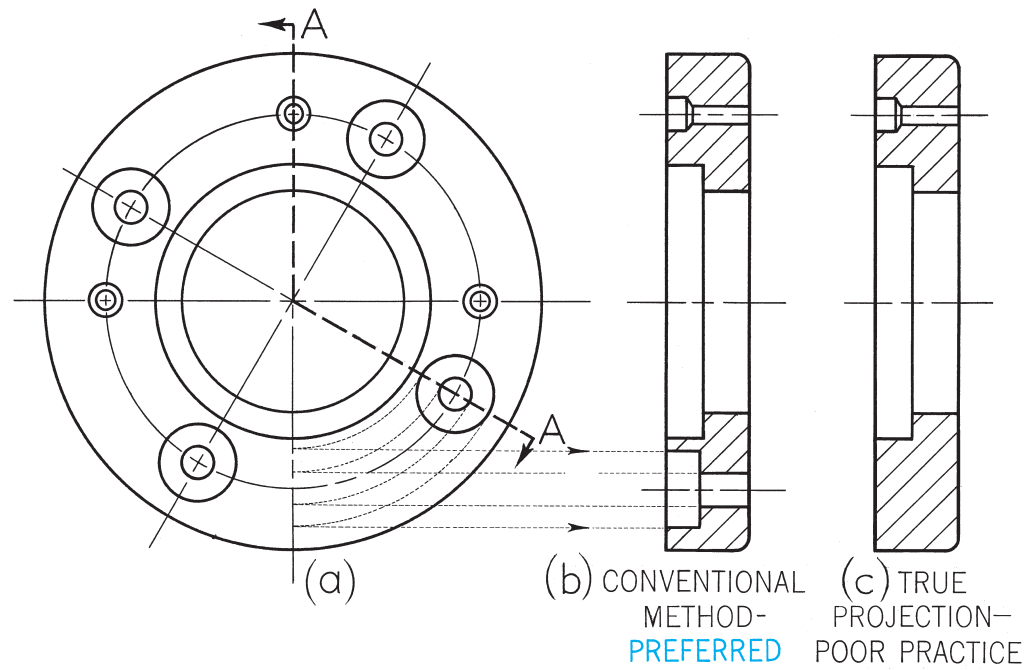


Figure 7-29  
Aligned Section.

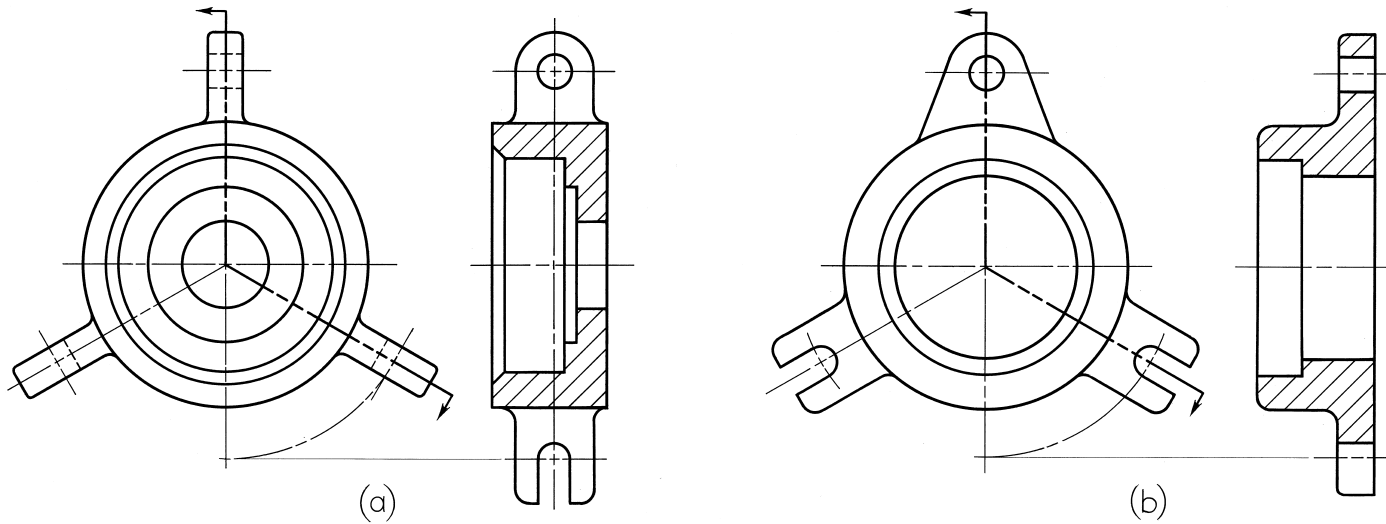


Figure 7-30  
Aligned Sections.

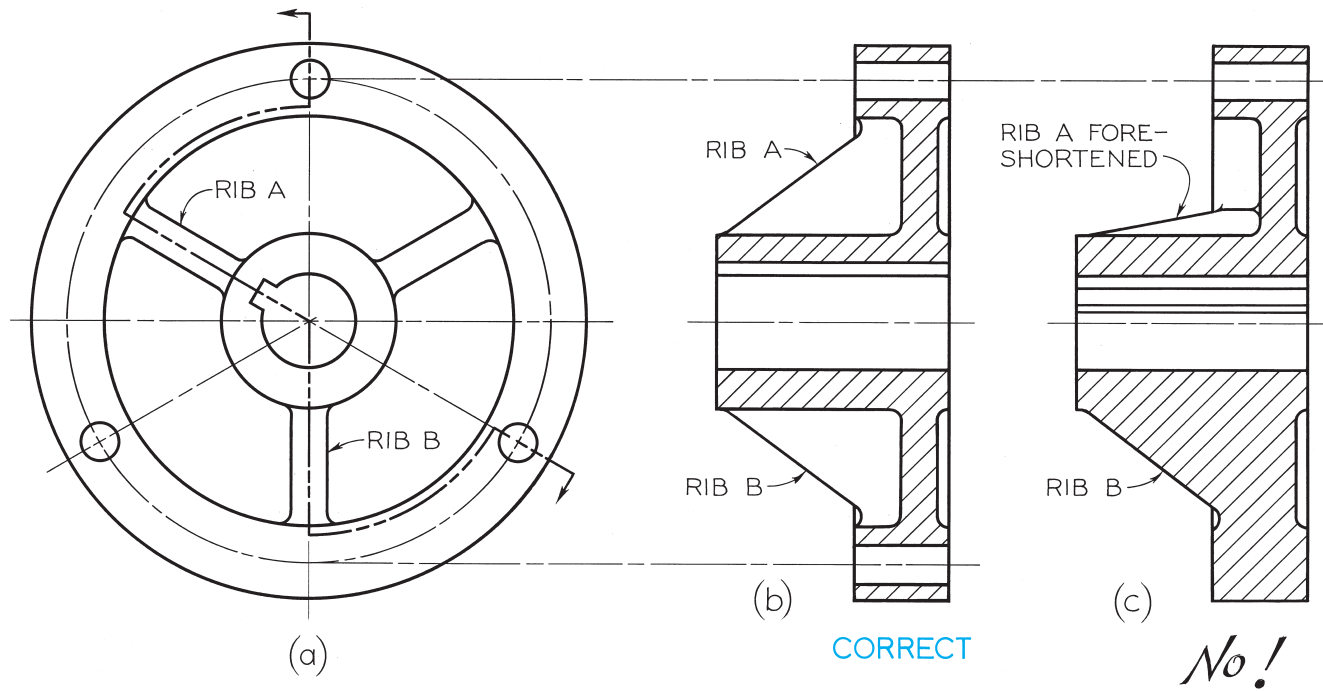


Figure 7-31  
Symmetry of Ribs.

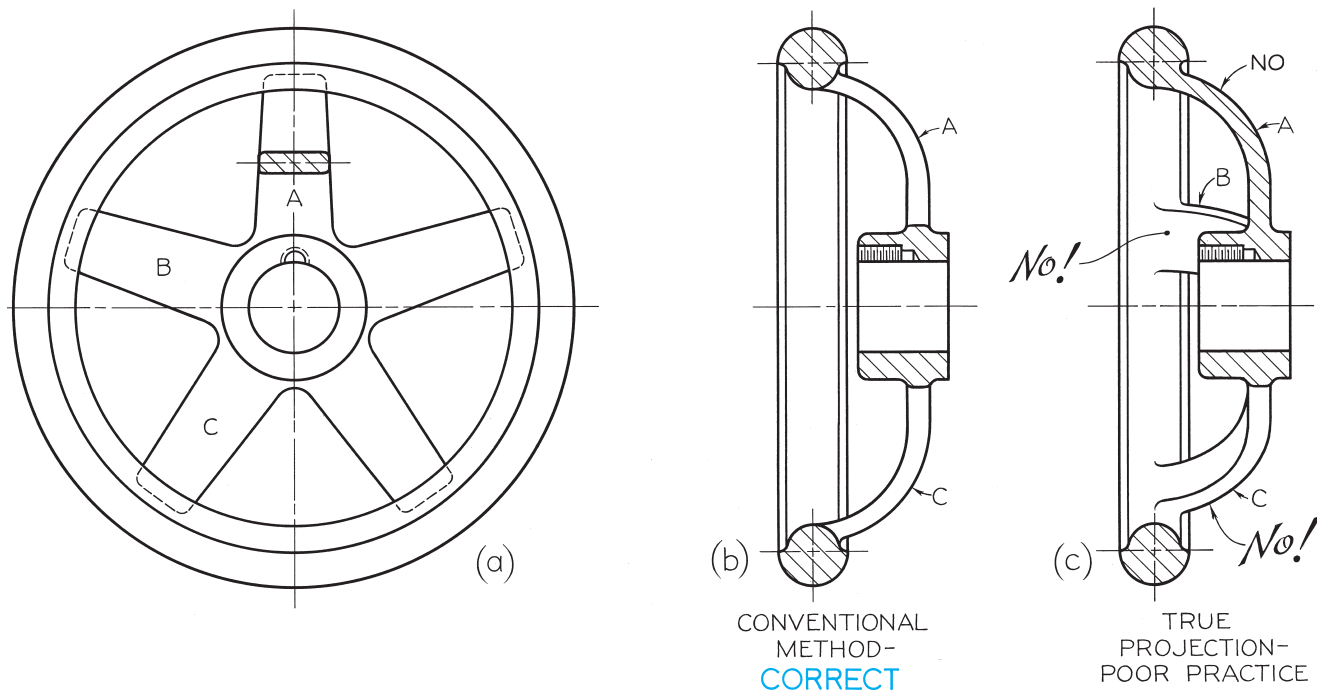


Figure 7-32  
Spokes in Section.

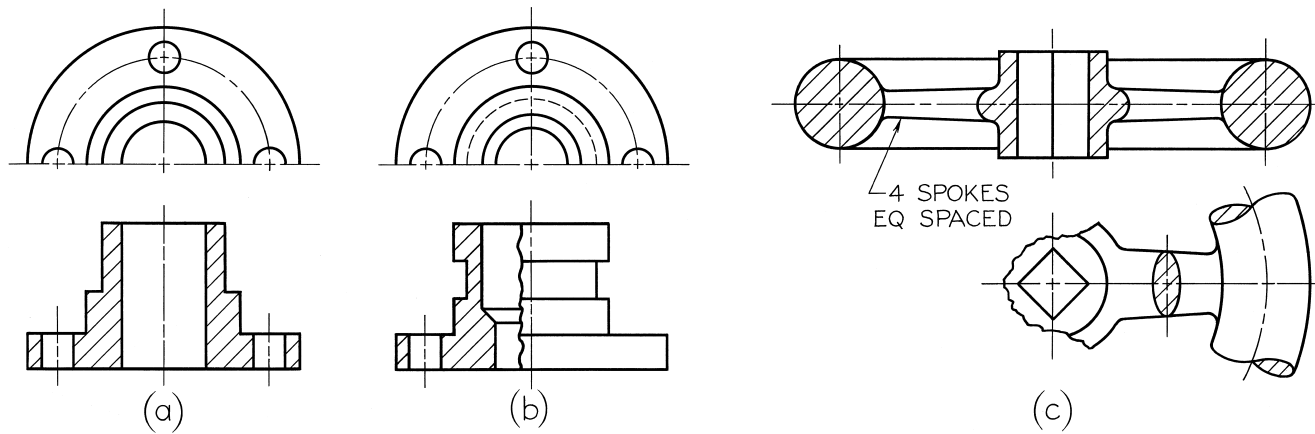


Figure 7-33  
Partial Views.

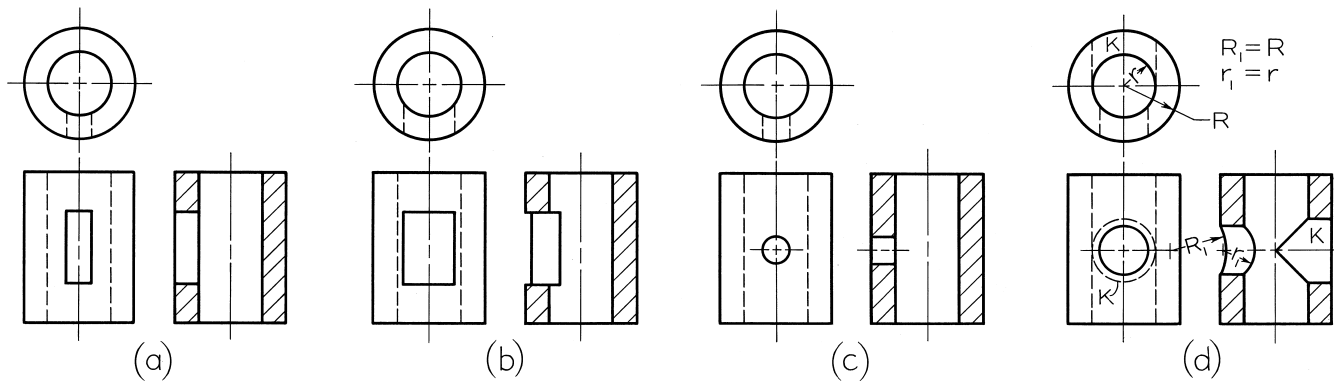


Figure 7-34  
Intersections.



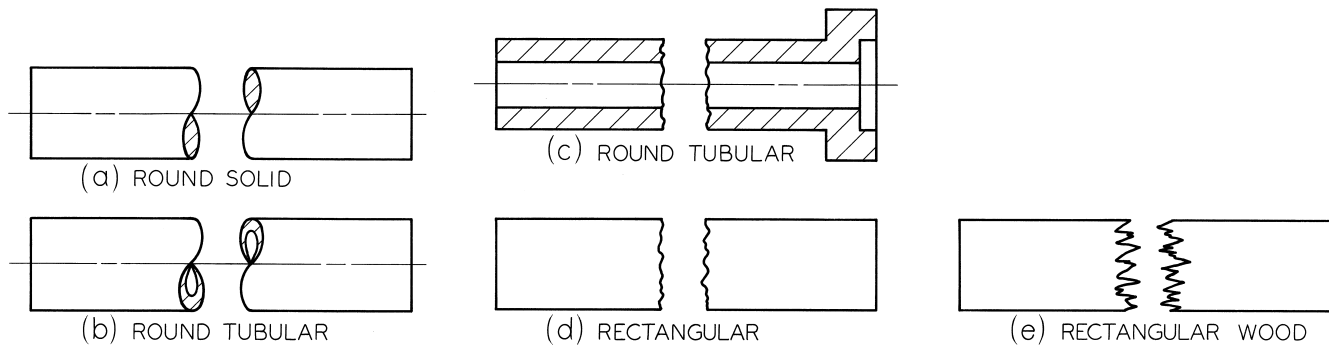


Figure 7-35  
Conventional Breaks.

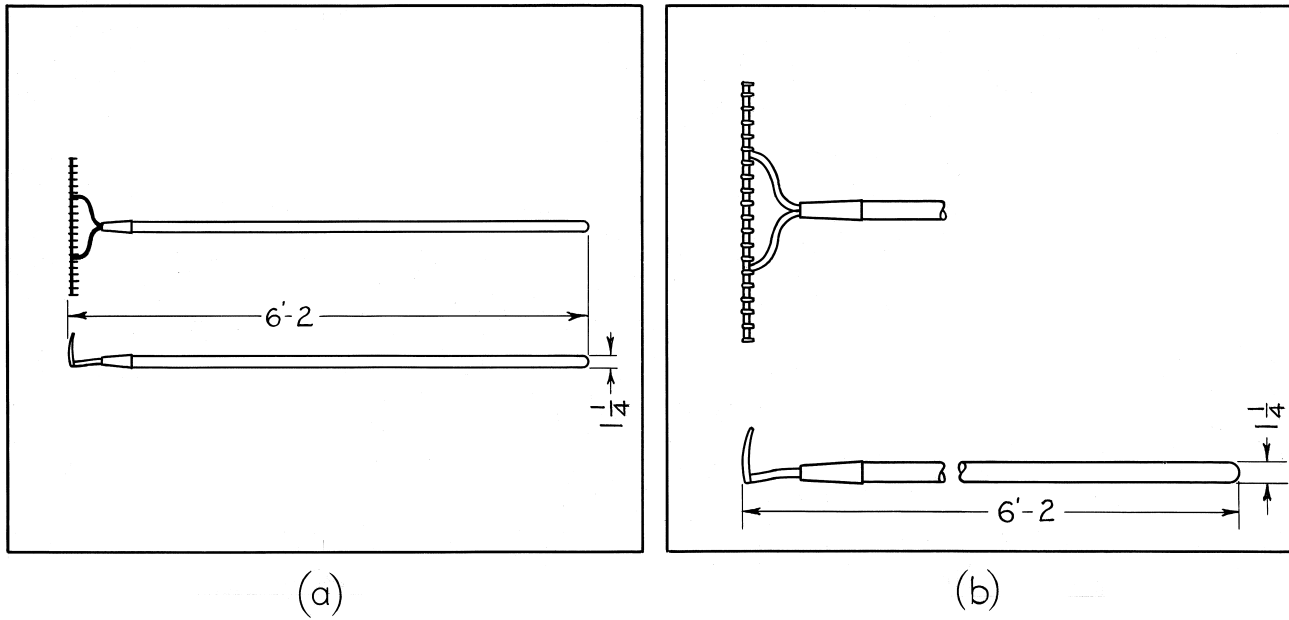


Figure 7-36  
Use of Conventional Breaks.

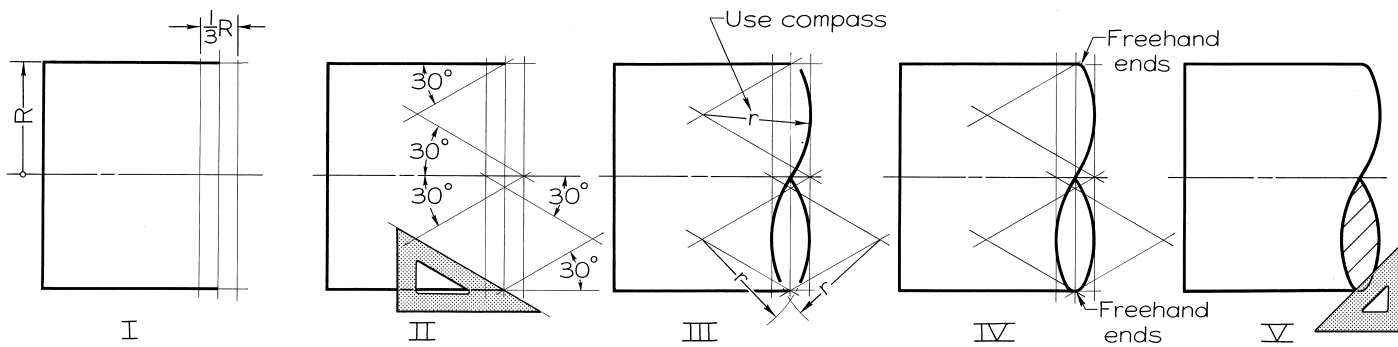


Figure 7-37

Steps in Drawing S-Breaks for Solid Shaft.

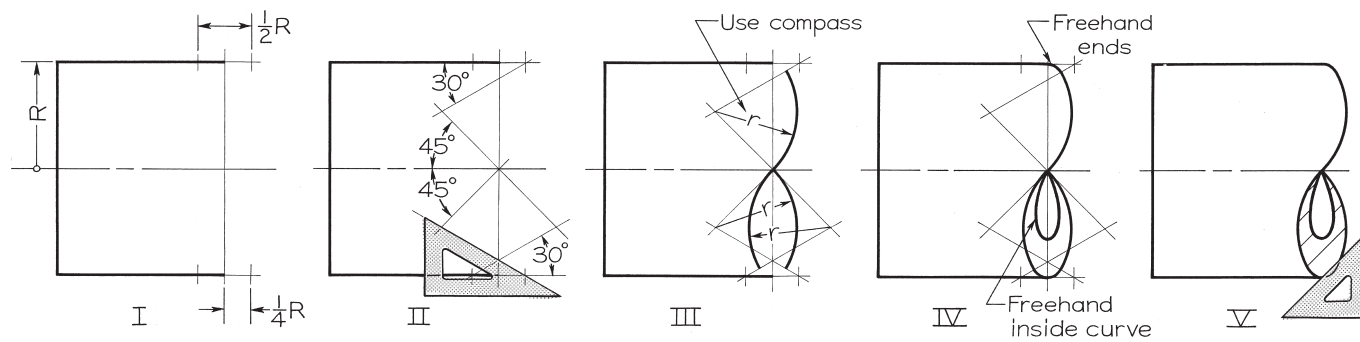


Figure 7-38  
Steps in Drawing S-Breaks for Tubing.