

Question Bank – Technical Drawing Metal

Table of Contents

Question Bank – Technical Drawing Metal.....	1
<u>ASSEMBLY DRAWINGS & DETAILS.....</u>	1
<u>READING OF DRAWINGS.....</u>	38
<u>VIEWS.....</u>	61
<u>MACHINE ELEMENTS.....</u>	87

Question Bank – Technical Drawing Metal

T.T.P. Series No. 42



DEVELOPMENT CELL FOR SKILLED LABOUR TRAINING

DIRECTORATE OF MANPOWER & TRAINING
GOVERNMENT OF THE PUNJAB
LAHORE

This Question Bank with its sections:

VIEWS, MACHINE PARTS and ASSEMBLY DRAWING & DETAILS covers all main aspects of technical drawing relevant for trainees in the Metal Trades.

It provides a multitude of questions to the Trade Test Authorities and to teachers and instructors in Training Centers and undertaking and thus to a great extent relieves them of the time consuming work of again and again finding and compiling new questions for intermediate and final tests.

Throughout this Question Bank multiple-choice questions have been used as only this type of questioning allows for a high degree of objectivity and for a time saving method of checking. Of great importance for the assessment is the fact that only one of the given answers is correct.

For teachers and instructors a major advantage of this Question Bank is that not only can tests be set up in a very short time but that they can also be carried out within minutes (e.g. an intermediate test with 15 different questions on a special topic can be conducted within 20–30 minutes).

Thus it is much easier for the teacher to permanently maintain a clear picture of the knowledge of his students. The student himself is able to check his knowledge regularly and the whole series of questions may help him in preparing for the final test as well.

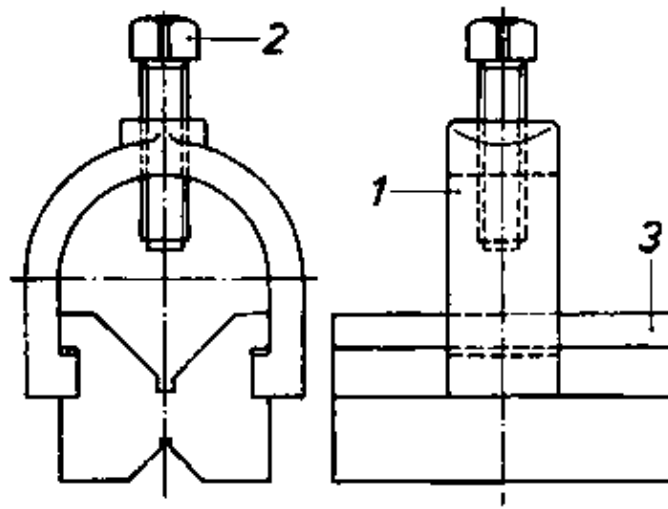
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ALWAYS USE A SEPARATE MARKING SHEET!**

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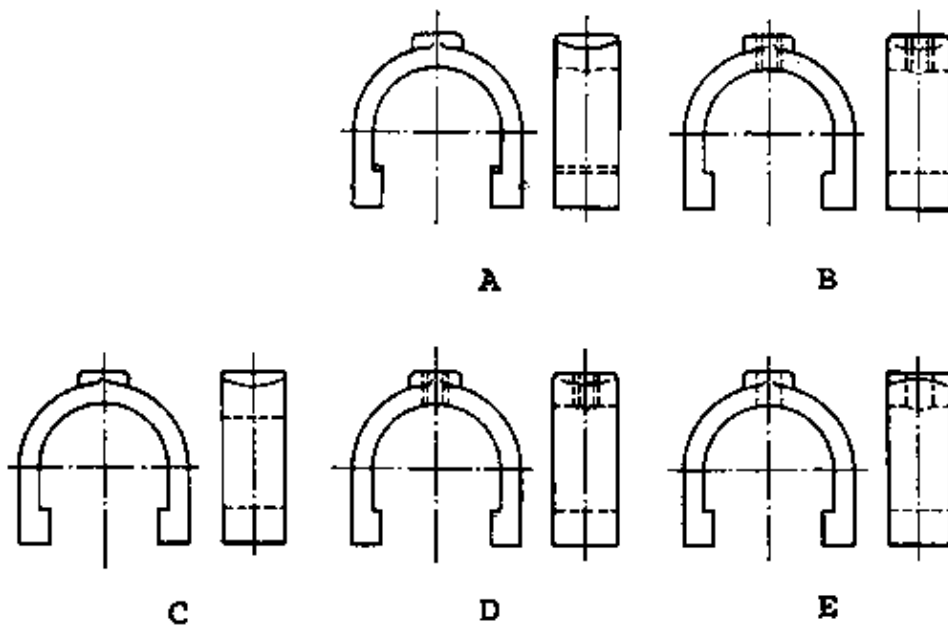
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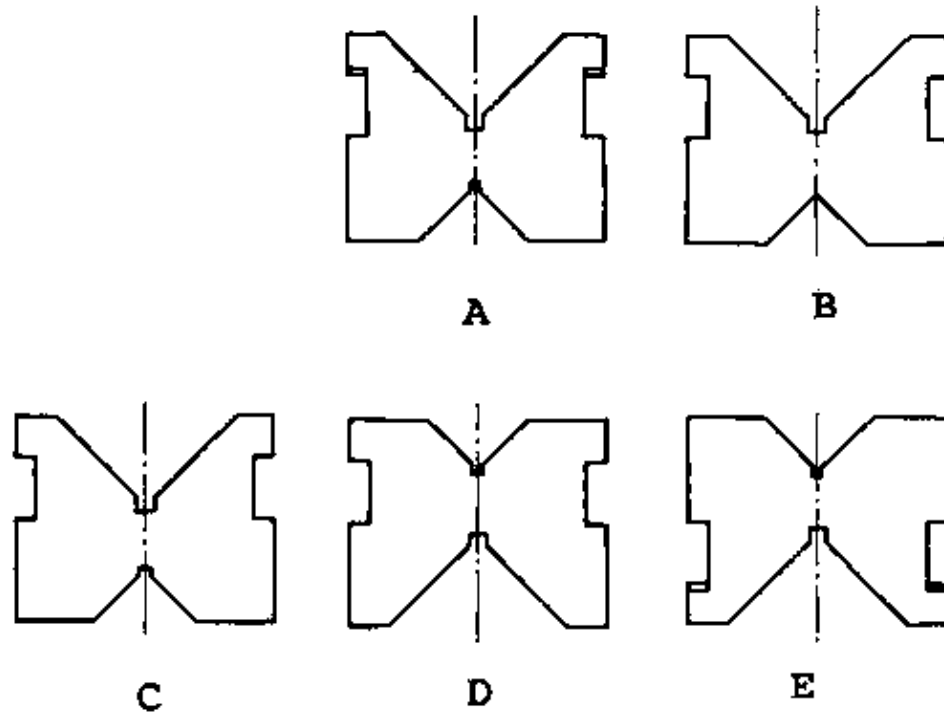
ASSEMBLY DRAWINGS & DETAILS



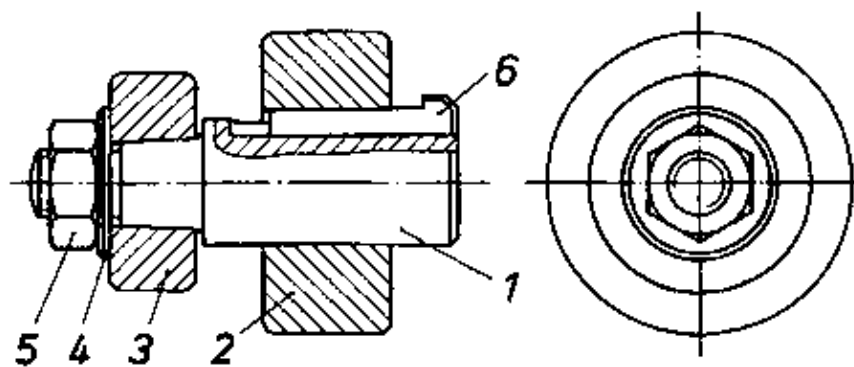
A&D 1.1: Which picture shows the correct representation of the clamping bow?



A&D 1.2: Which picture shows the correct representation of the prism?

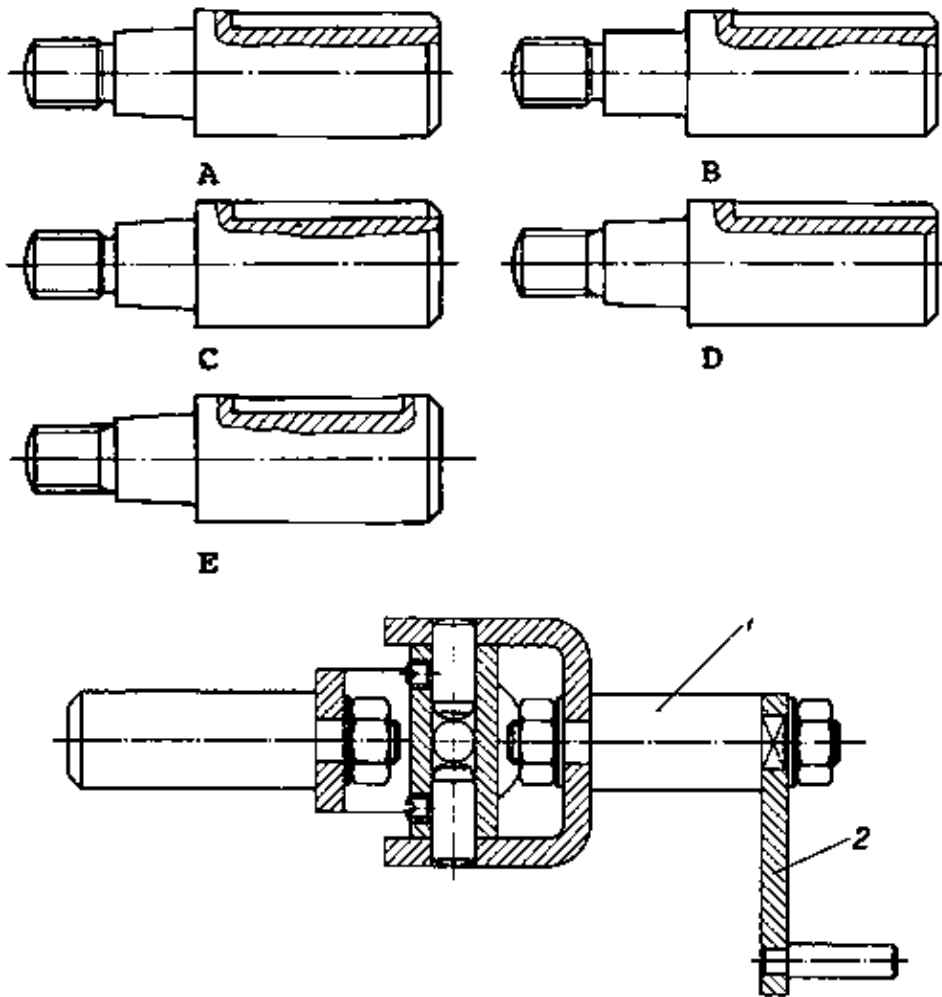


A&D 2.1: What is the correct expression for part 6?

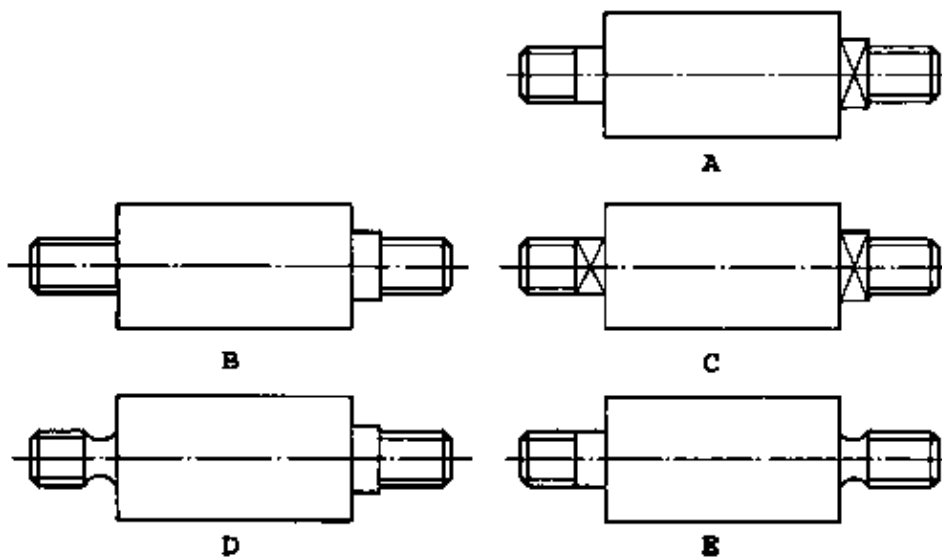


- A. Parallel key
- B. Sunk key
- C. Hollow key
- D. Gib head key
- E. Studded parallel key

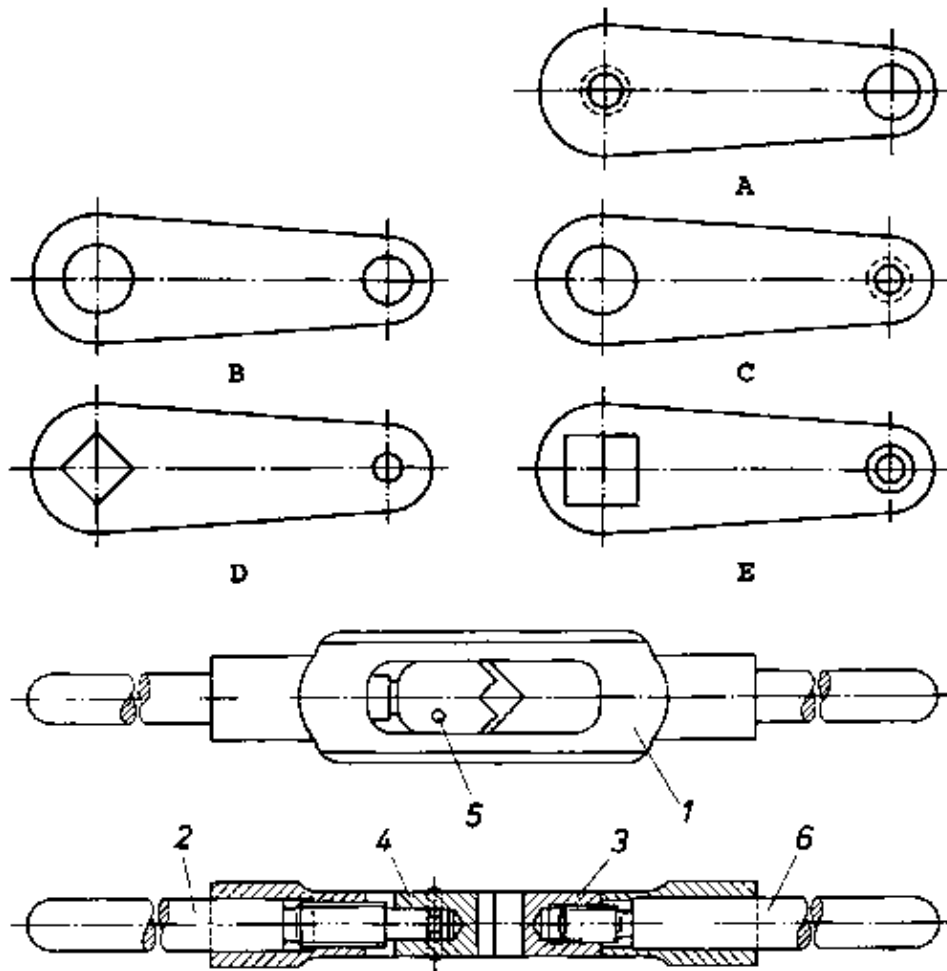
A&D 2.2: Which picture gives a correct representation of part 1?



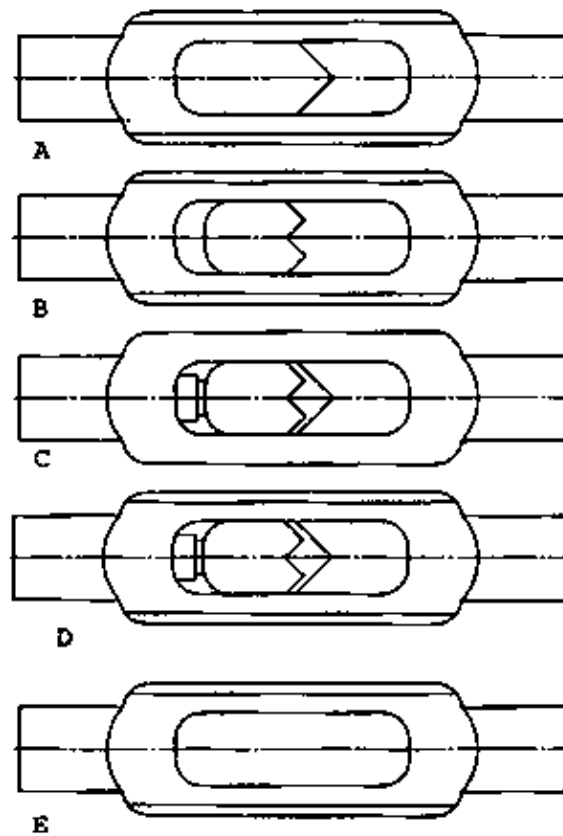
A&D 3.1: Which picture gives a correct representation of part 1?



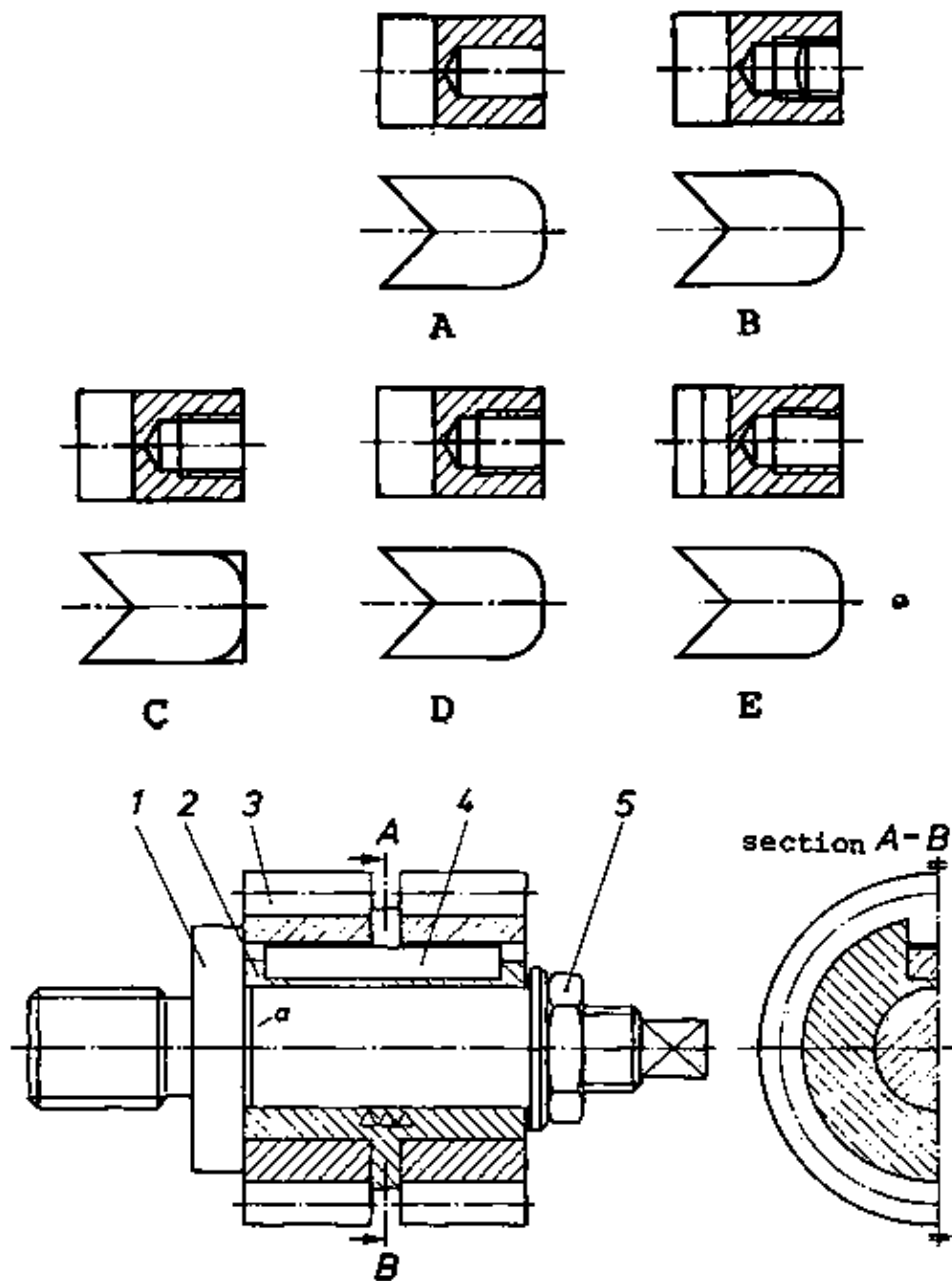
A&D 3.2: Which picture gives a correct representation of part 2?



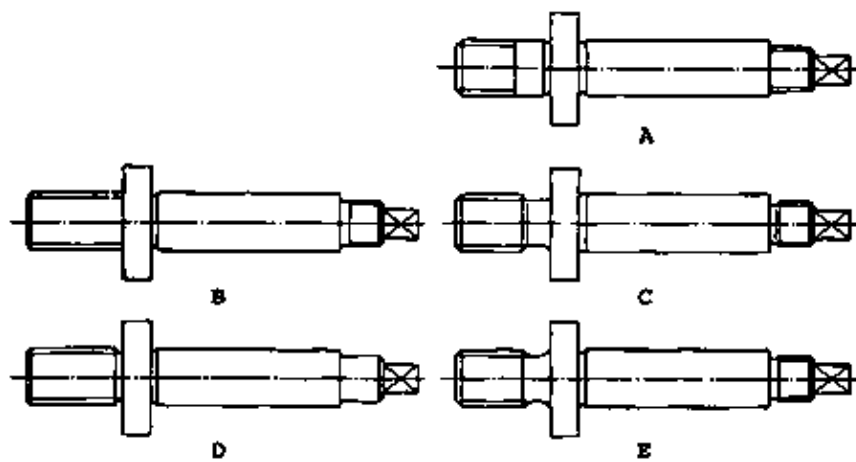
A&D 4.1: Which picture gives a correct representation of part 1?



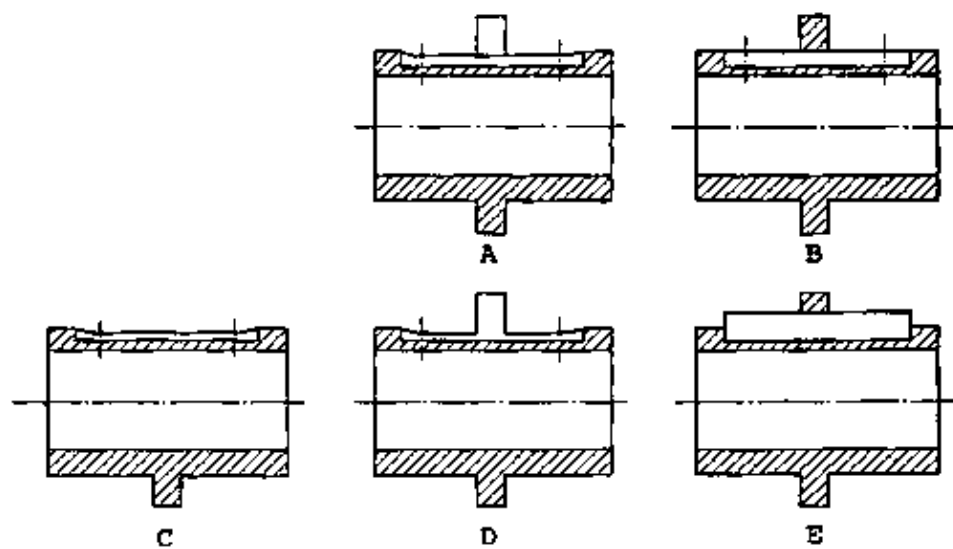
A&D 4.2: Which picture gives a correct representation of part 3?



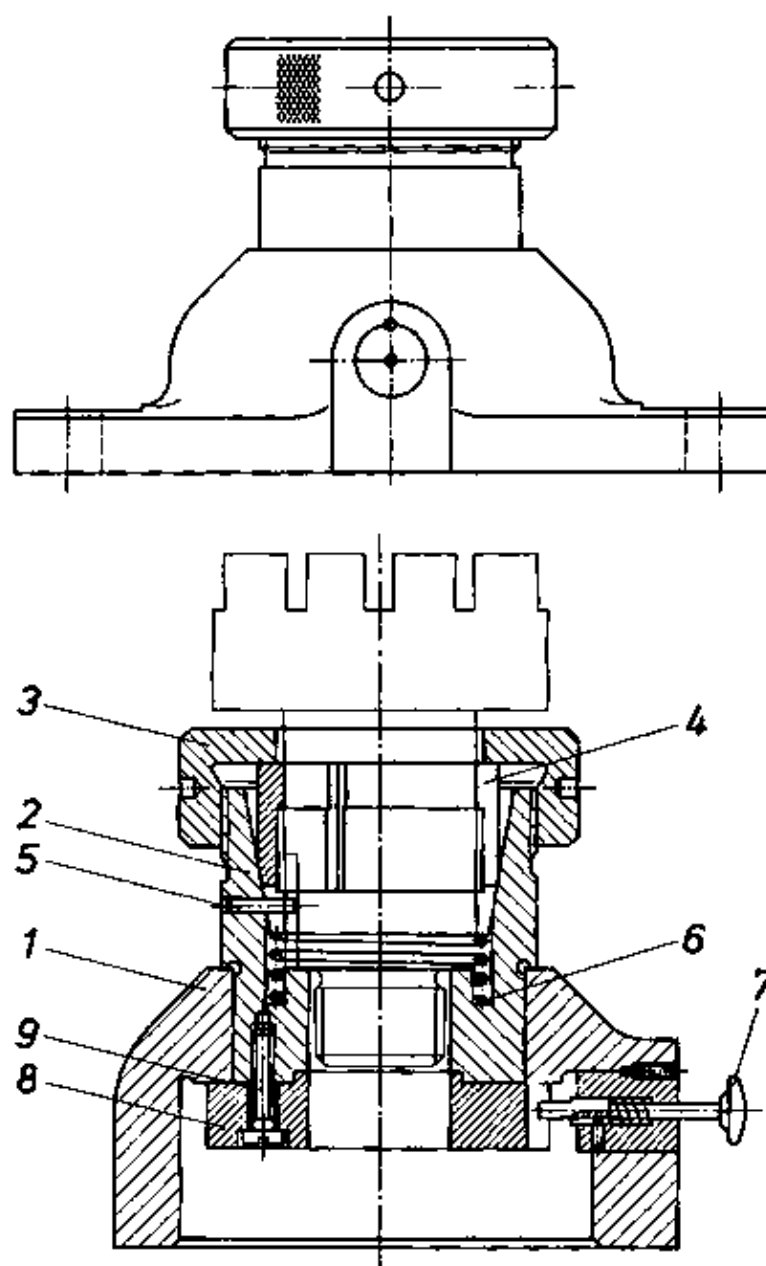
A&D 5.1: Which picture gives a correct representation of part 1?

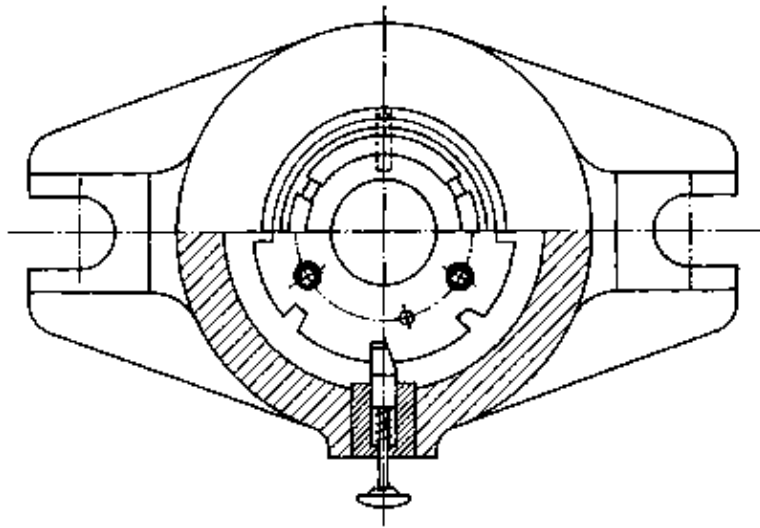


A&D 5.2: Which picture gives a correct representation of part 2?



MILLING DEVICE





plan view without part 3

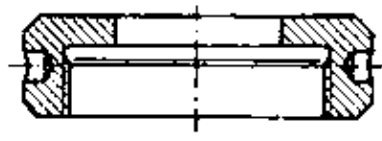
A&D 6/1.1: Which of the pictures gives a correct representation of part 3 of the milling device?



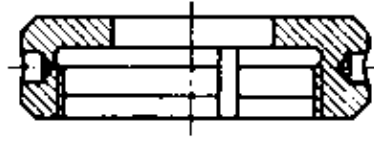
A



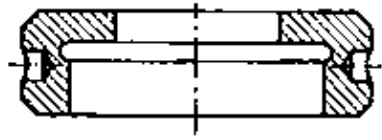
B



C

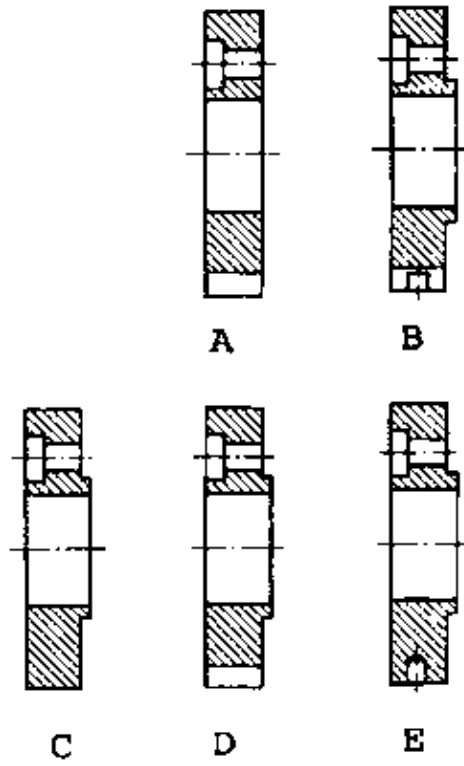


D

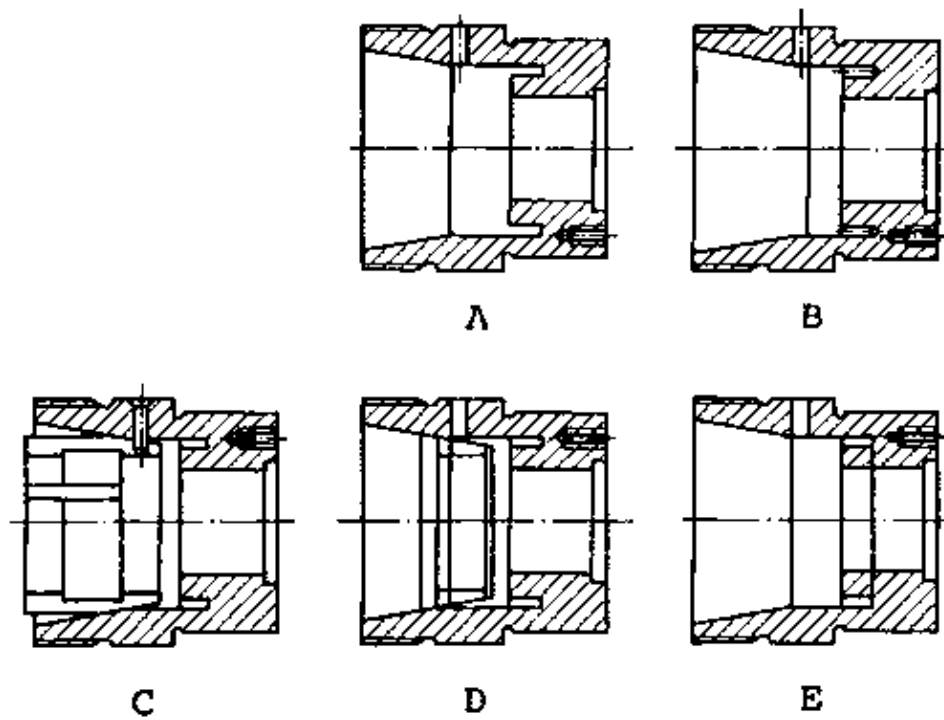


E

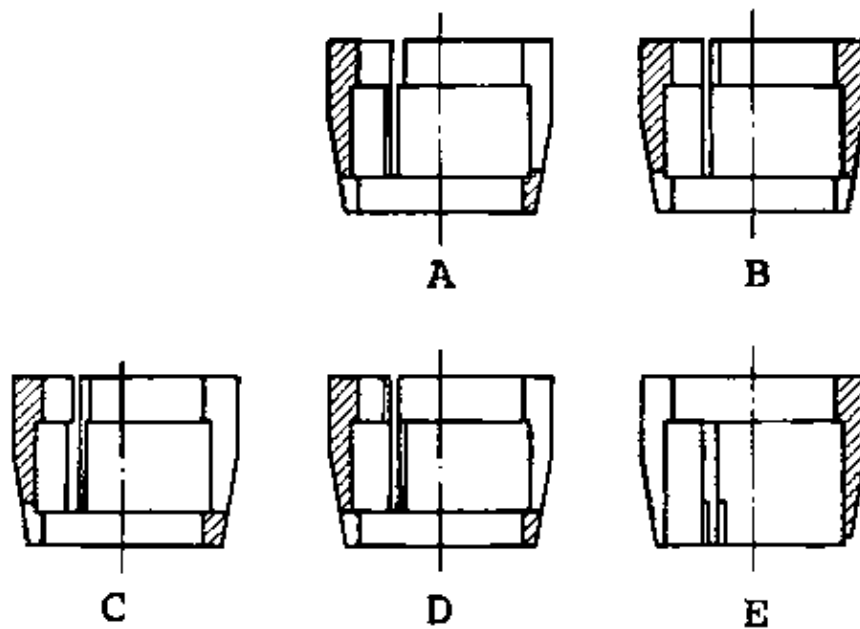
A&D 6/1.2: Which of the pictures gives a correct representation of part 8 of the milling device?



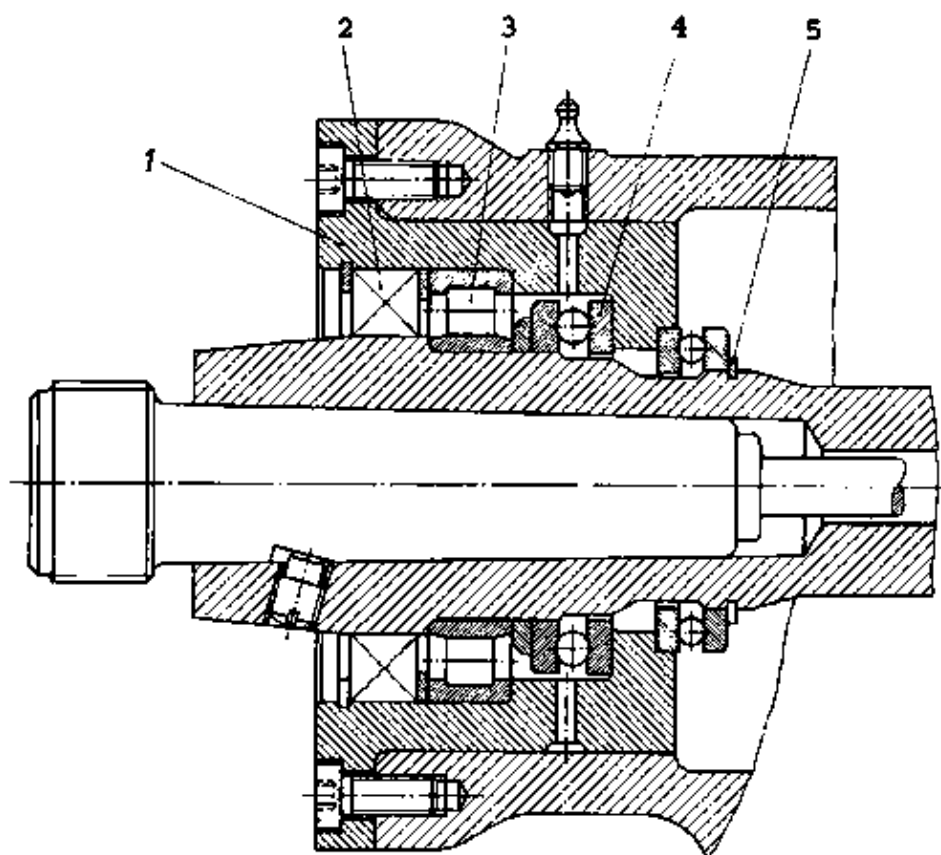
A&D 6/1.3: Which of the pictures gives a correct representation of part 2 of the milling device?



A&D 6/1.4: Which of the pictures gives a correct representation of part 4 of the milling device?



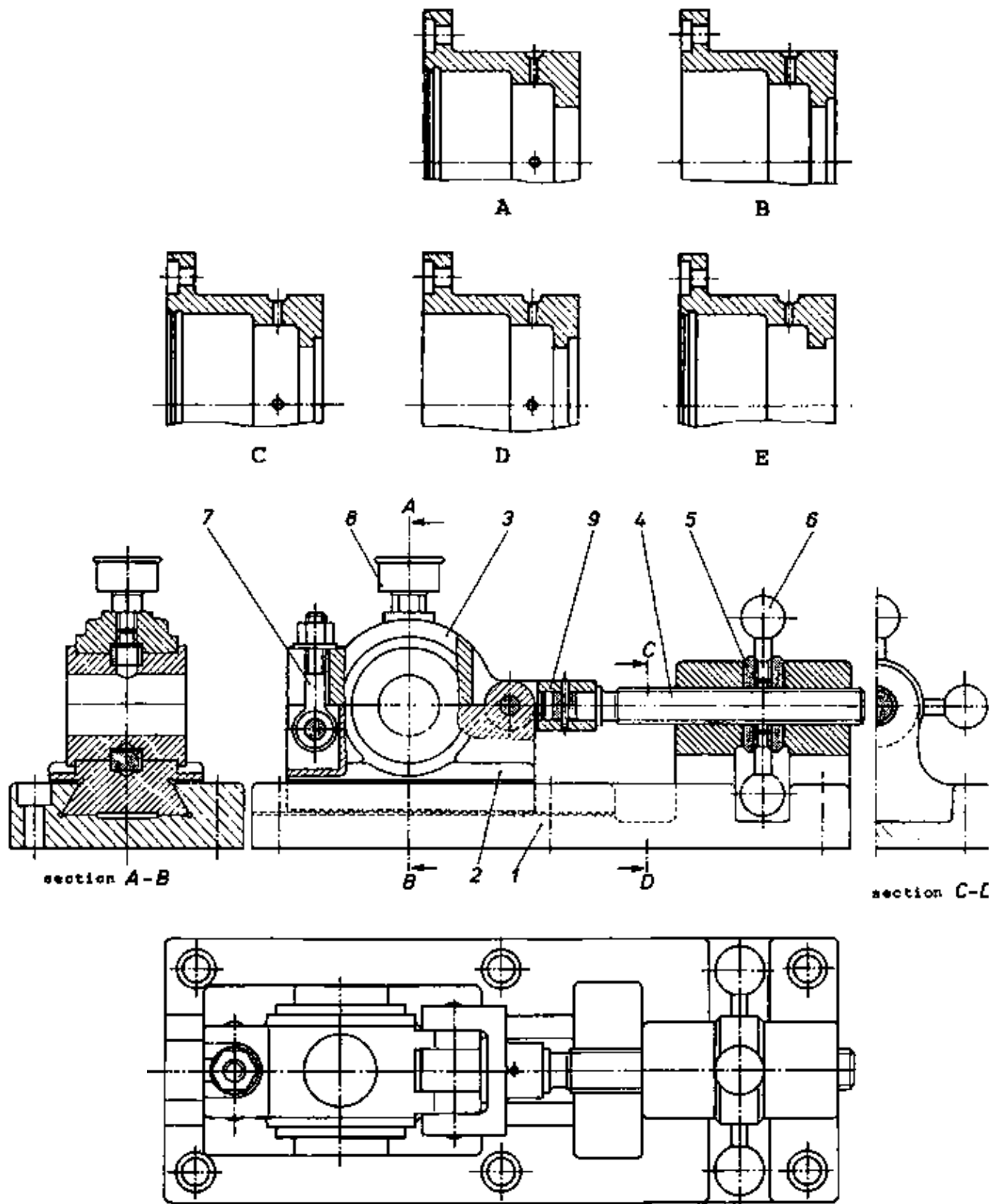
A&D 7



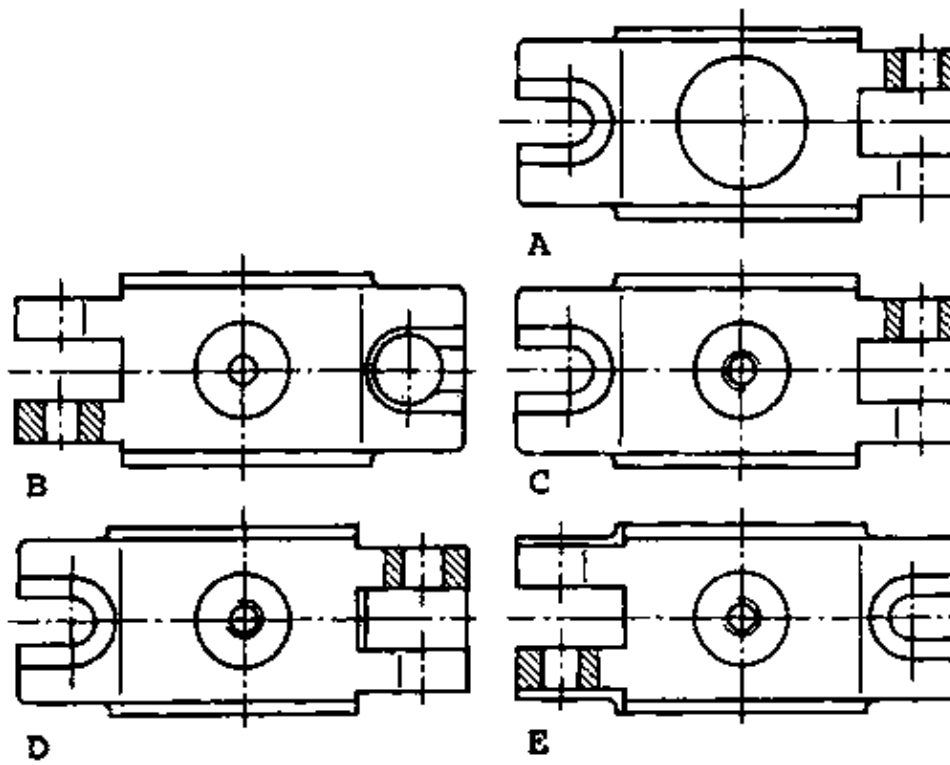
A&D 7.1: Which of the following is the correct expression for the machine element marked with '3'?

- A. Thrust bearing
- B. Roller bearing
- C. Axial bearing
- D. Self-aligning roller bearing
- E. Needle bearing

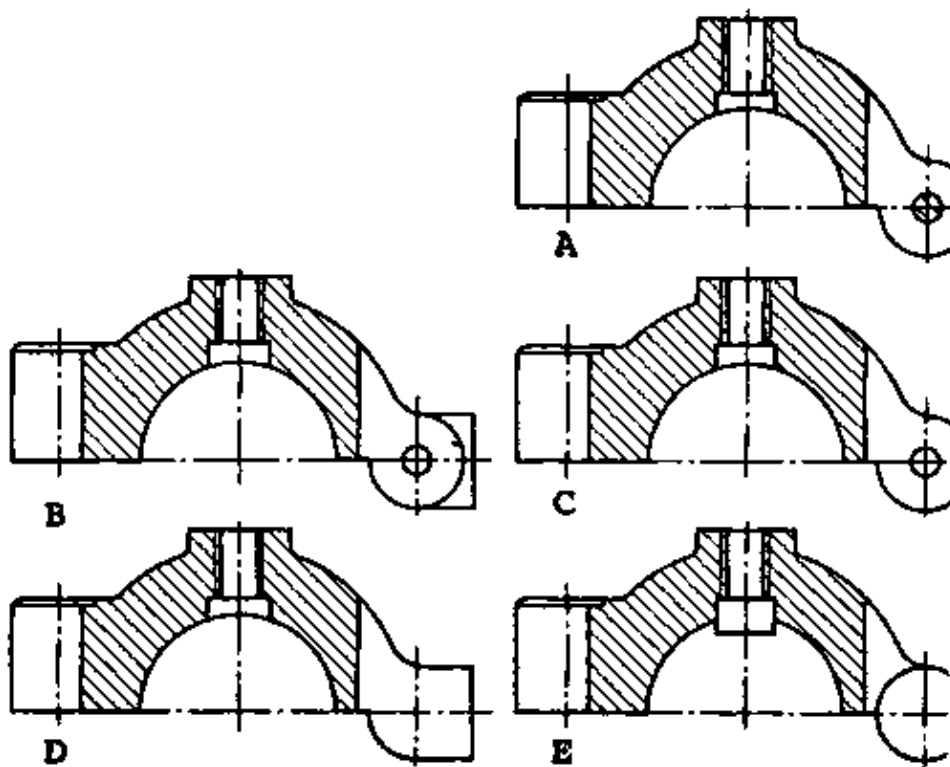
A&D 7.2: Which of the pictures gives a correct representation of part 1?



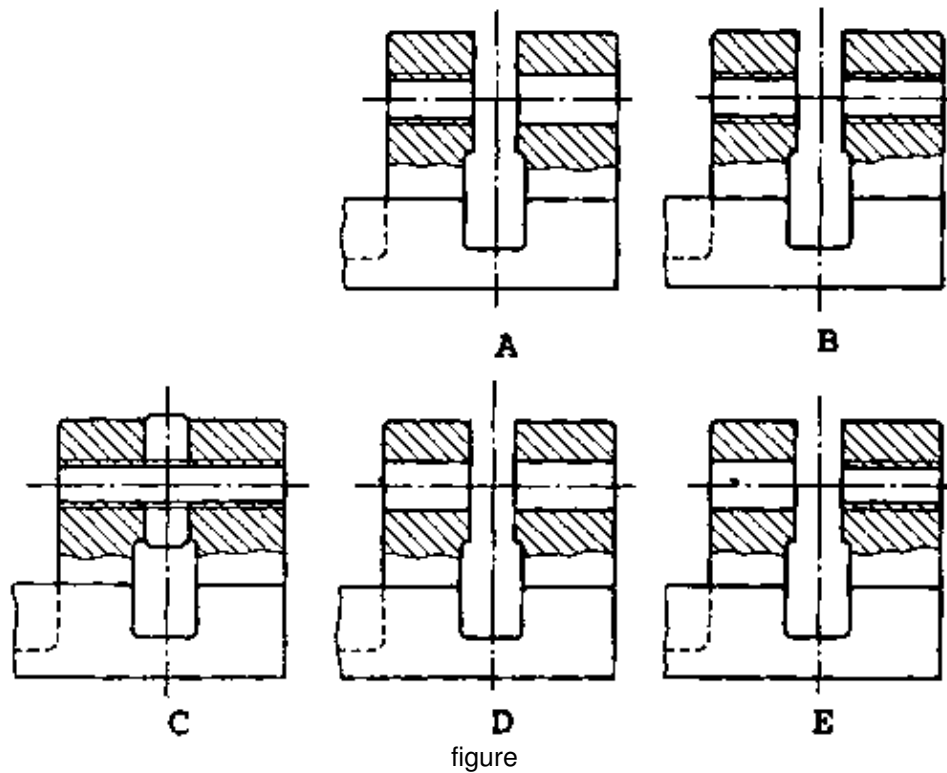
A&D 8/1.1: In which of the pictures is the plan view of part 3 shown correctly?



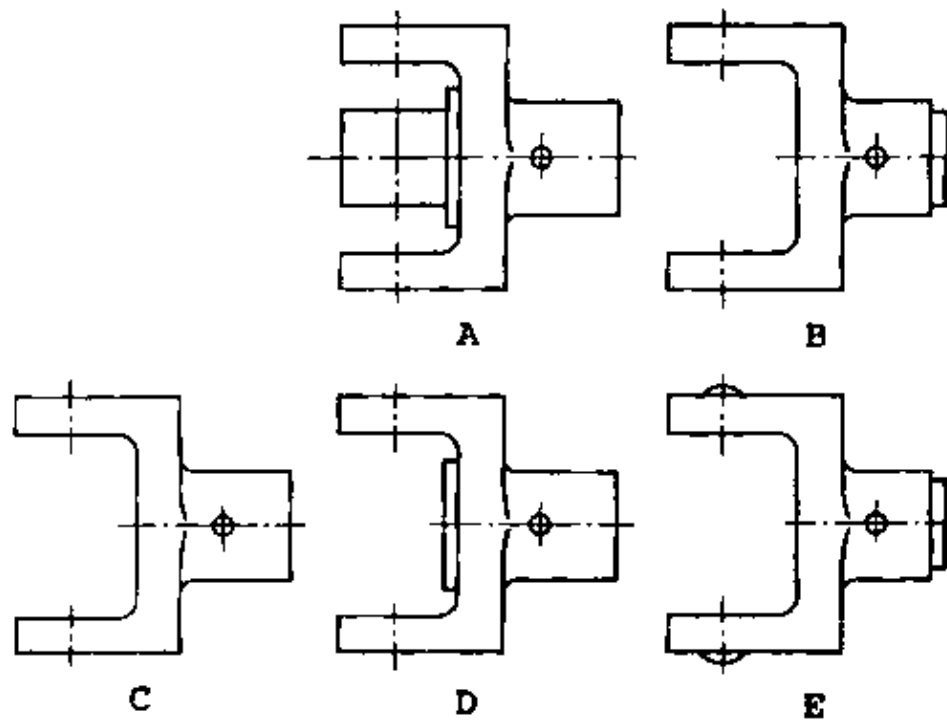
A&D 8/1.2: Which of the pictures gives a correct sectioned view of part 3?



A&D 8/1.3: In which of the pictures is the partial section of part 1 shown correctly?



A&D 8/1.4: In which of the pictures is the plan view of part 9 shown correctly?



A&D 8/2.1: Which part of the bearing does not move if part 5 is turned by means of ball handles?

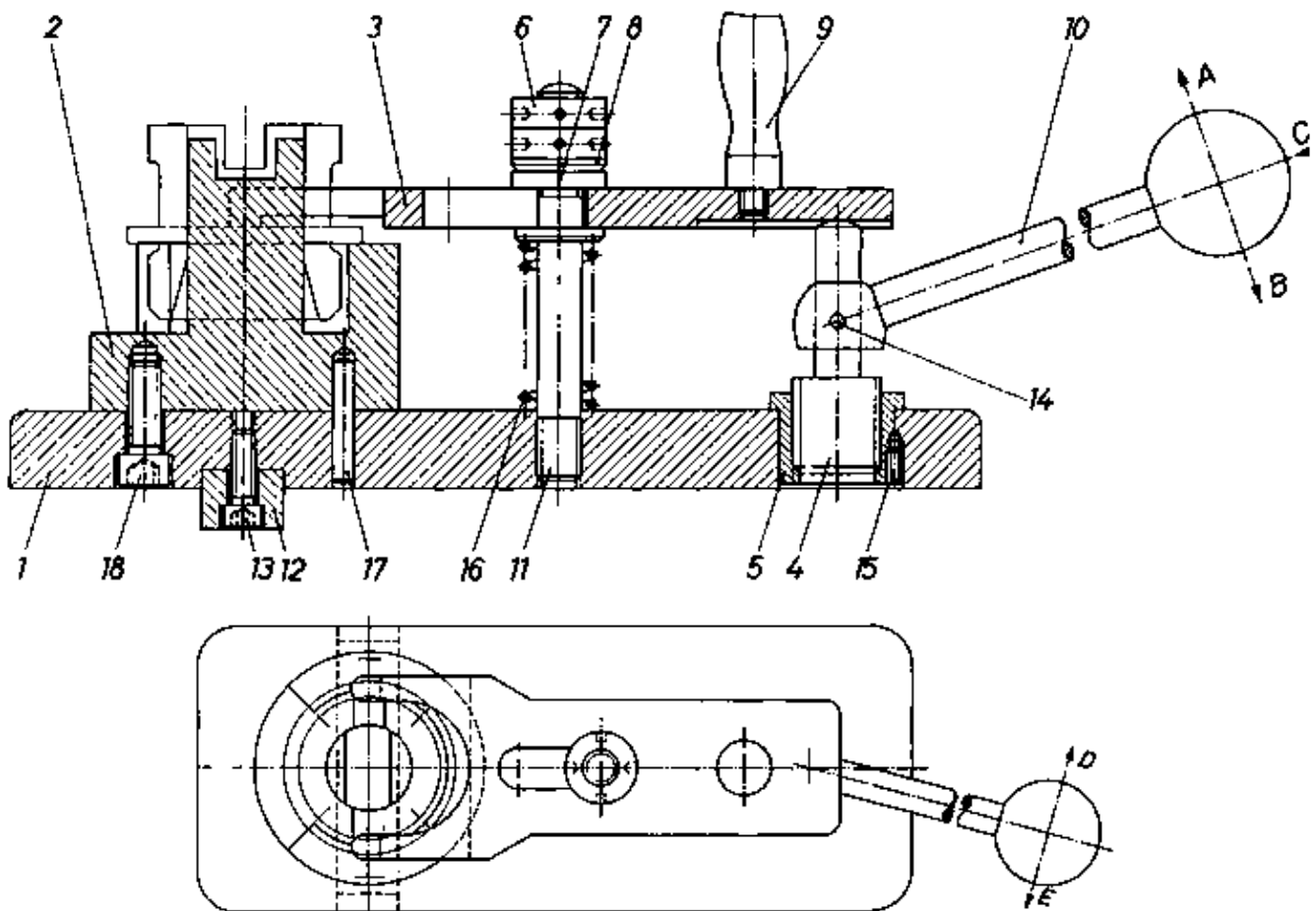
- A. part 1
- B. Part 2
- C. part 3
- D. part 4
- E. part 5

A&D 8/2.2: What is the purpose of part 8?

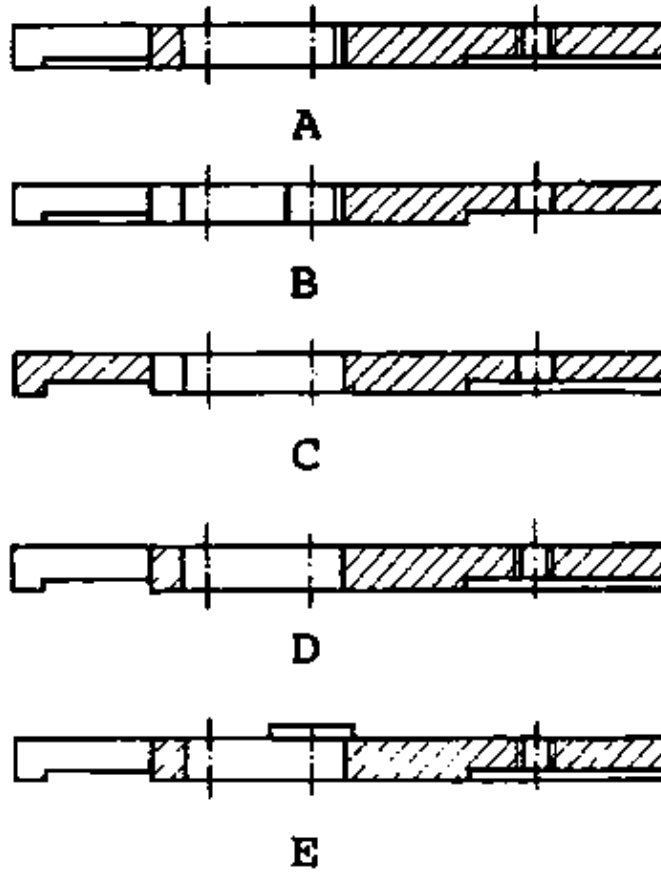
- A. Lubrication
- B. Ventilation
- C. Control of the temperature inside the bearing
- D. Lifting of the bearing cover
- E. Adjustment of the bearing pressure

A&D 8/2.3: Which of the given materials is commonly used for the production of the parts 1, 2 and 3?

- A. Grey cast iron
- B. St 50
- C. High alloy steel
- D. Brass
- E. Aluminium–silicium alloy



A&D 9/1.1: Which of the pictures gives a correct re-Presentation of part 3?



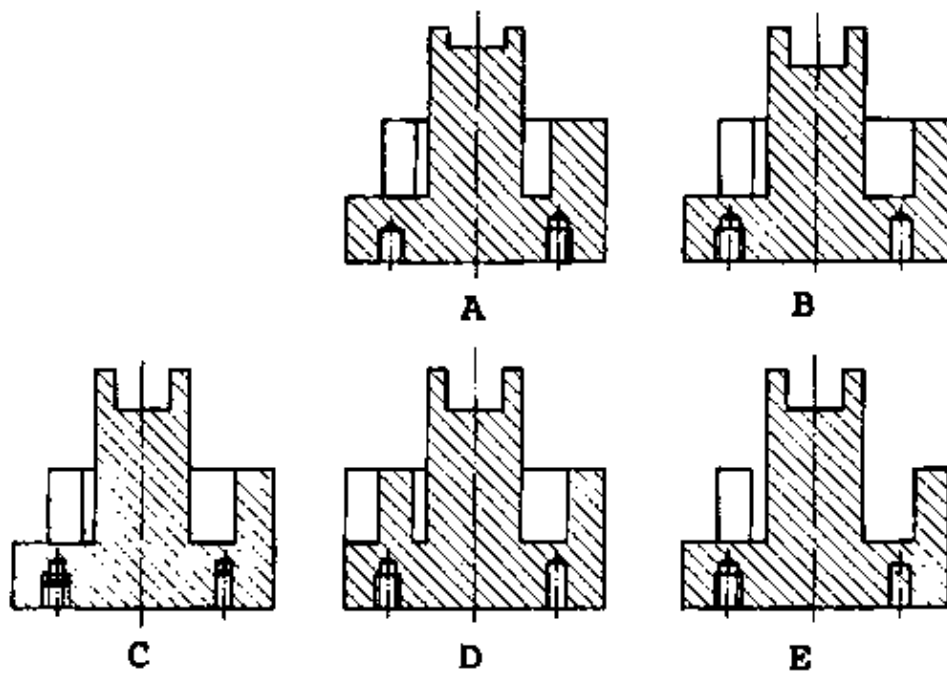
A&D 9/1.2: Which of the following is the correct name for the standard part marked with '17'?

- A. Stud
- B. Tapered pin
- C. Grooved pin
- D. Woodruff pin D. Parallel pin

A&D 9/1.3: Which of the following is the correct name for the standard part marked with '8'?

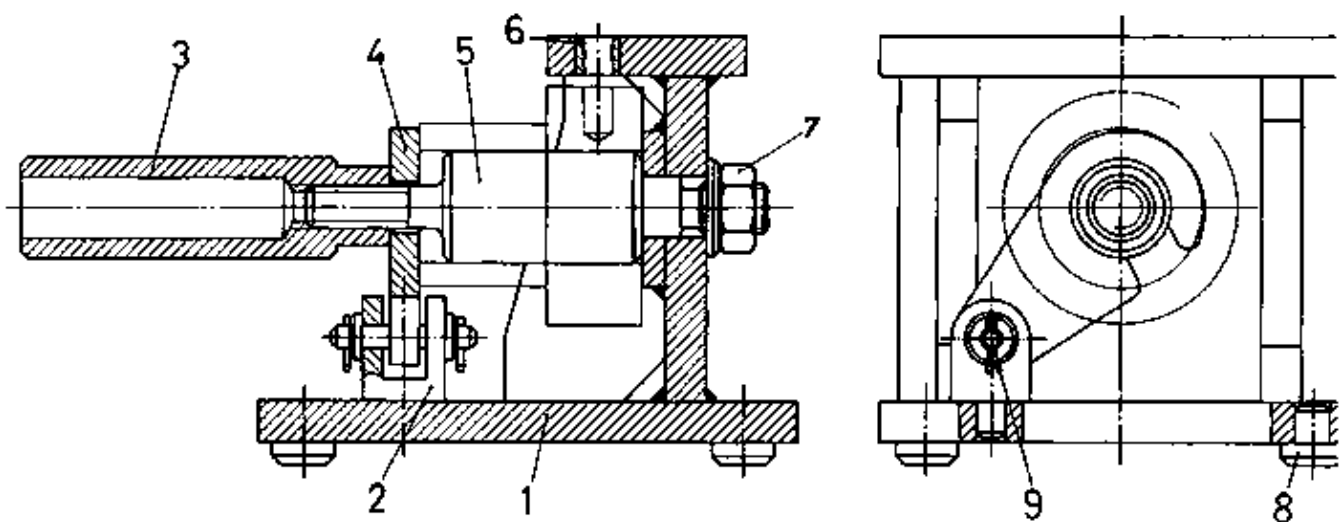
- A. Hexagon bolt
- B. Square head bolt
- C. Hexagon fitting screw
- D. Threaded pin
- E. Socket head cap screw

A&D 9/1.4: Which of the pictures gives a correct representation of part 2?

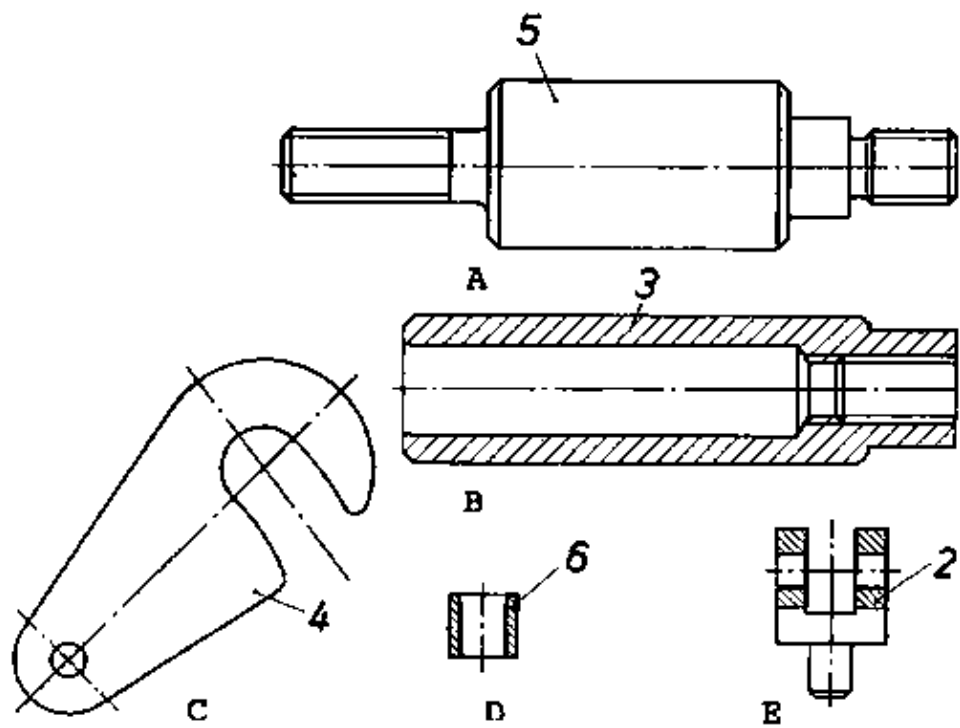


A&D 9/1.5: In which direction has the handle (part 10) to be moved if the workpiece shall be clamped? (part 4 has a right hand thread)

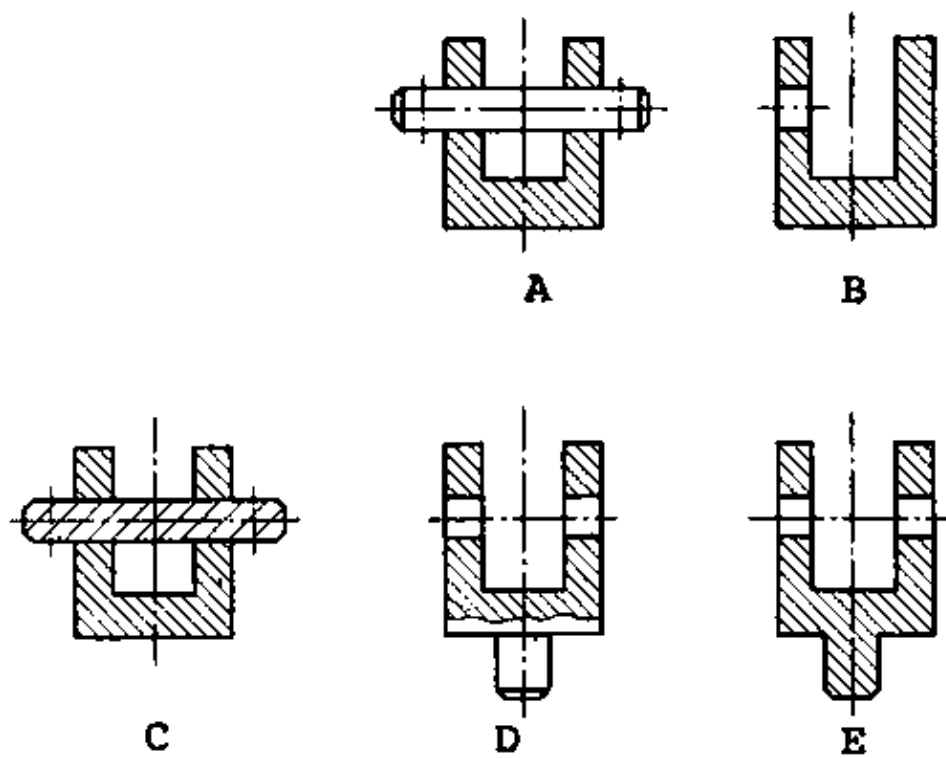
- A. direction A
- B. direction B
- C. direction C
- D. direction D
- E. direction E

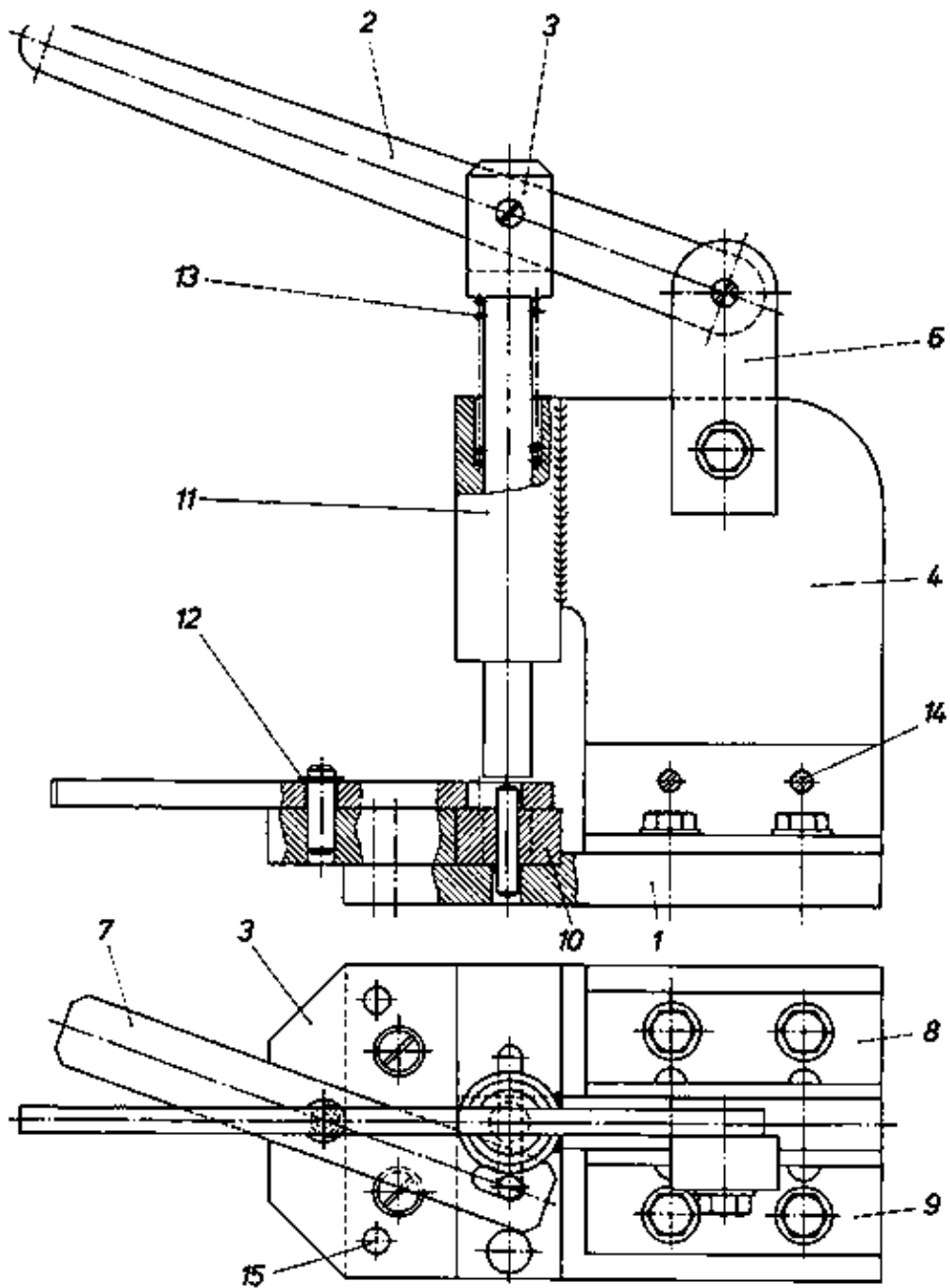


A&D 10.1: Which of the details is not shown correctly?



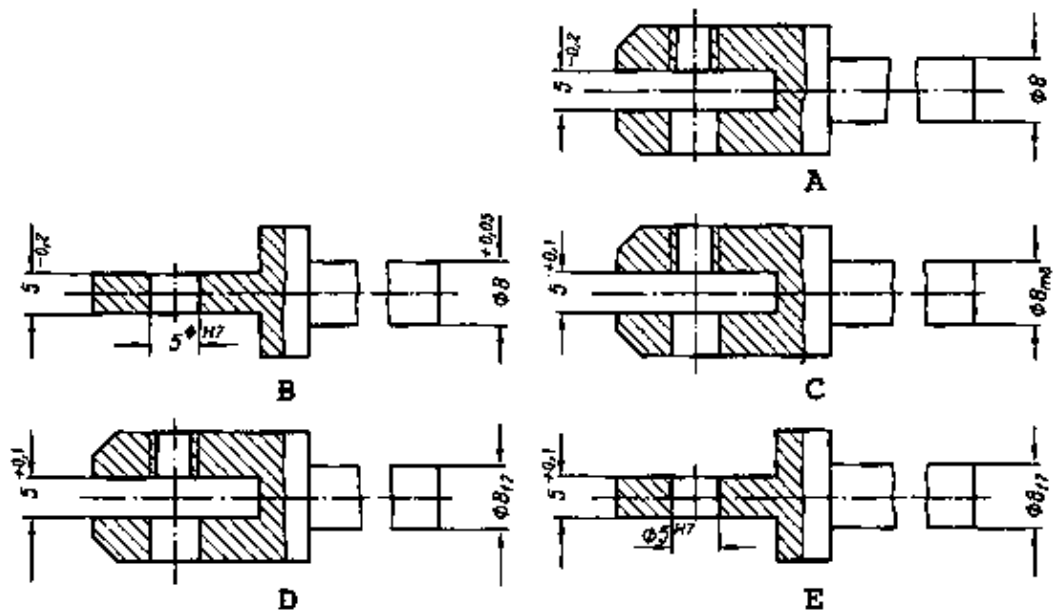
A&D 10.2: Which picture shows the correct section of part 2?





A&D 11/1.1: The punch (part 5) slides in the hole & empty; 8_{H7} of part 10.

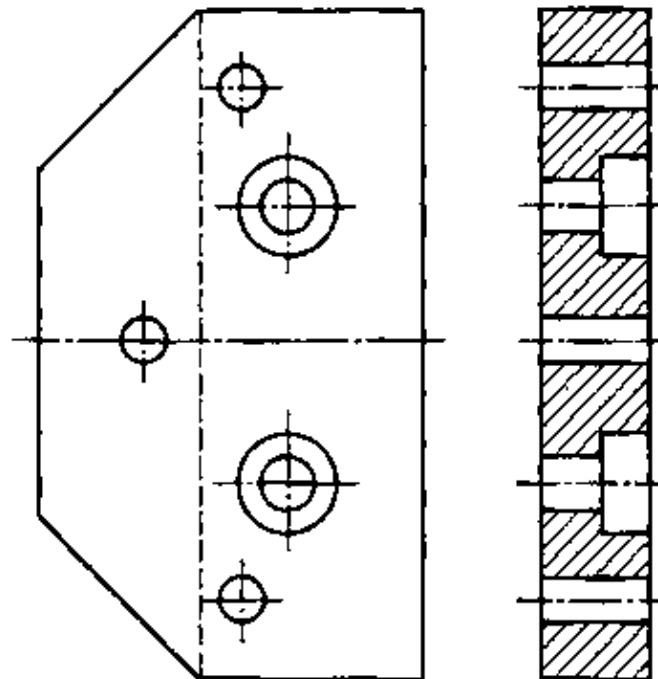
Which of the pictures shows the punch in a correct representation with correct tolerances?



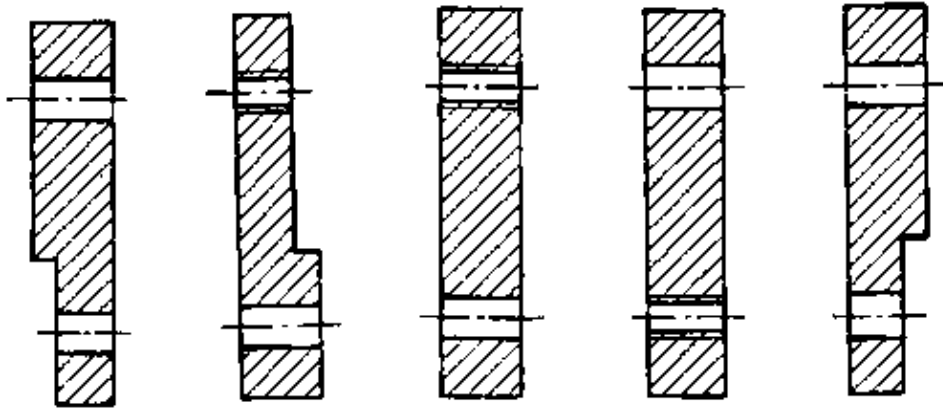
A&D 11/1.2: The drawing below shows part 4 of the lever press.

The drawing is incorrect. Which of the following statements names the fault?

- A. The drawing would be according to standards if in the non-sectioned view the course of the section was indicated.
- B. An invisible line was drawn which is actually non-existent.
- C. The section must be placed on the left hand side of the view.
- D. The pin holes must not be through-holes.
- E. In the representation of the countersunk holes one line each is too much.



A&D 11/1.3: Which of the pictures shows the full section of part 6 correctly?



A&D 12/1.1: Which of the following parts lifts the punch after the piercing operation back into its original position?

- A. part 2
- B. part 7
- C. part 10
- D. part 11
- E. part 13

A&D 12/1.2: Which of the following parts move if the lever is pressed down?

- A. only part 2
- B. only part 5
- C. part 2 and part 6
- D. part 2, 5 and 13
- E. part 5 and part 11

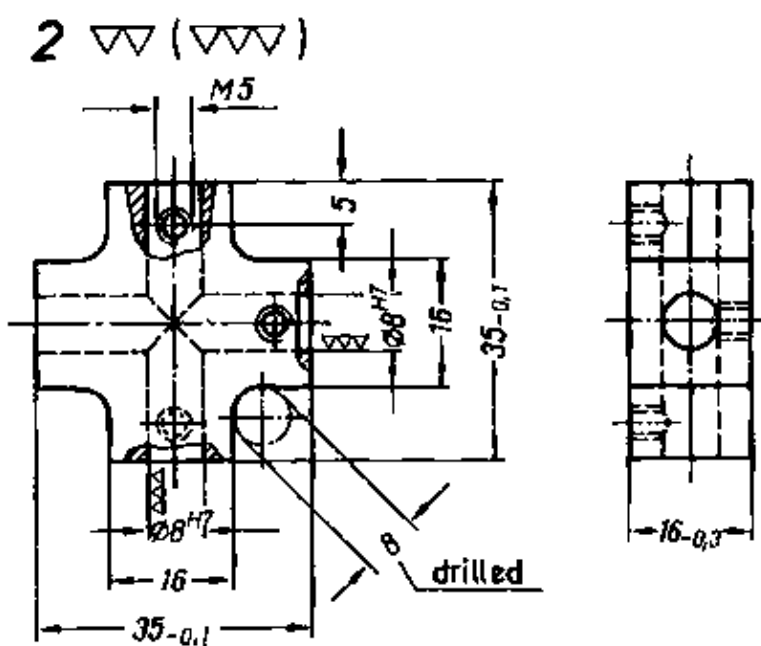
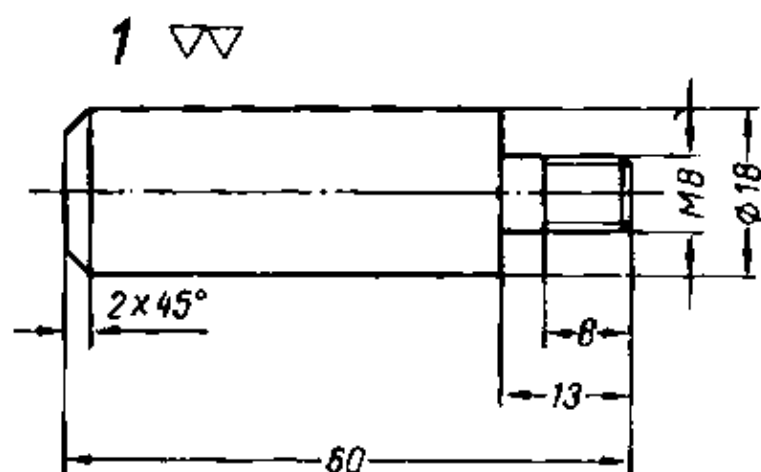
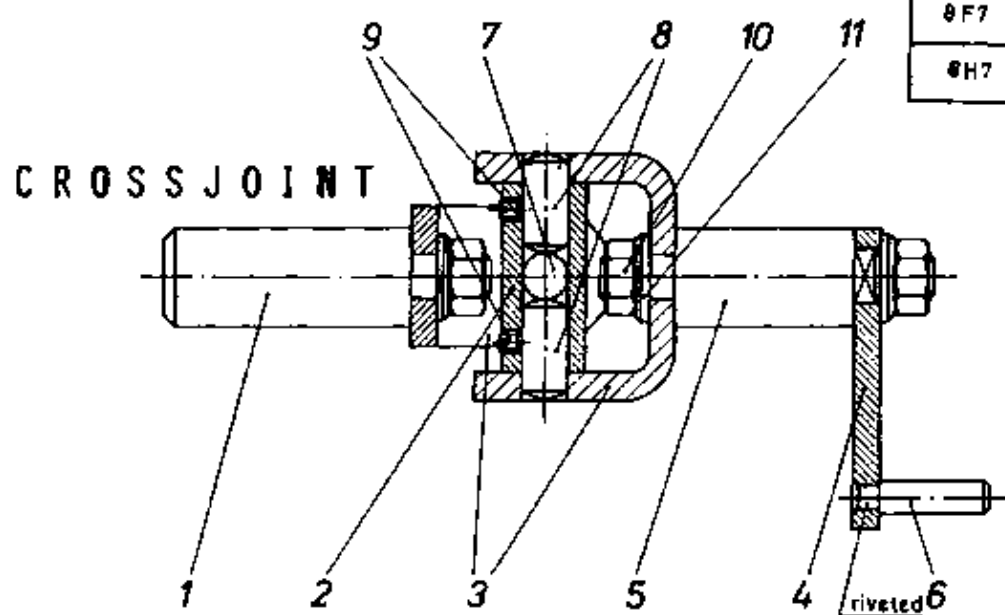
A&D 12/1.3: Which of the following is the correct expression for the machining element marked with '12'?

- A. locking plate
- B. spring washer
- C. locking nut
- D. toothed washer
- E. locking ring

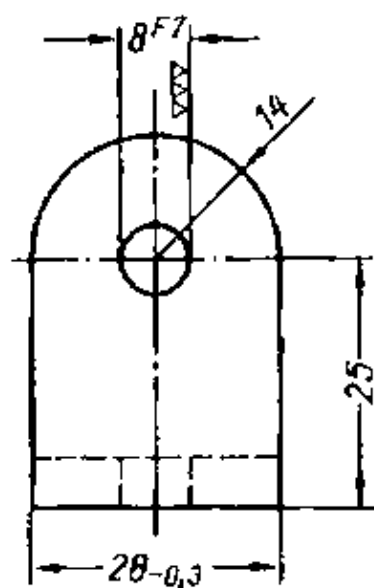
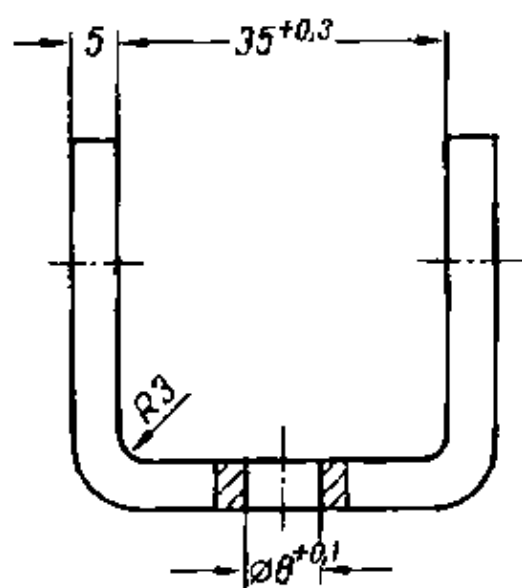
A&D 12/1.4: Which of the following is the correct expression for the machine element marked with '14'?

- A. parallel pin
- B. cheese head screw
- C. threaded pin
- D. half-round rivet
- E. half-round screw

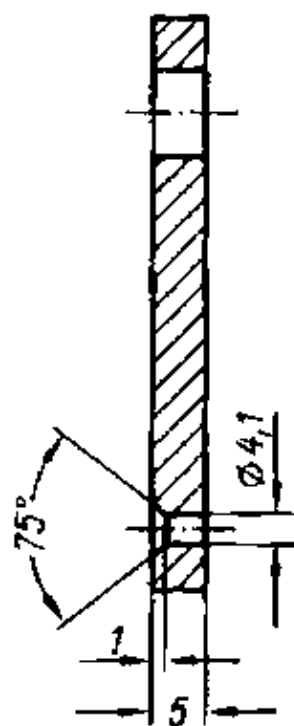
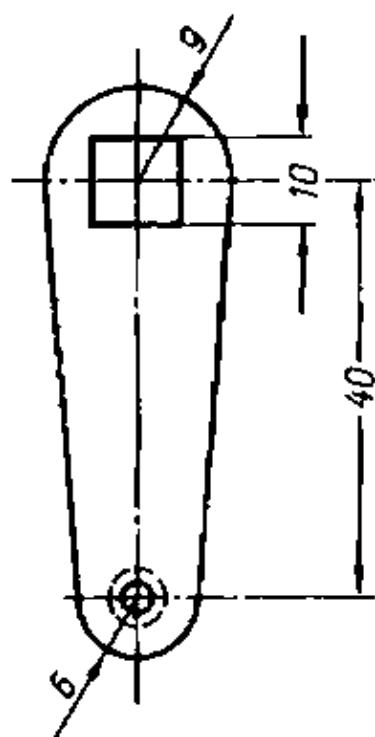
ISO Fit	Offsized
H7	+0.028 +0.013
H7	+0.015 0




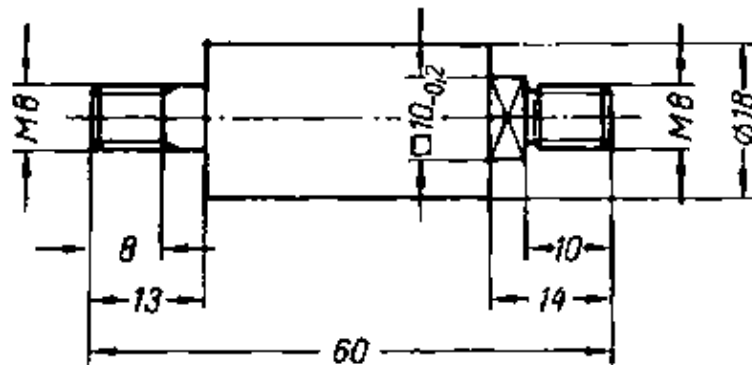
3 $\nabla \nabla (\nabla \nabla \nabla)$



4 $\nabla \nabla$



5 



A&D 21/1.1: Concerning parts 2 and 3:

What is the maximum possible clearance between the parts 2 and 3 of the cross joint?

- A. 0 mm
- B. 0.1 mm
- C. 0.2 mm
- D. 0.3 mm
- E. 0.4 mm

A&D 21/1.2: Concerning parts 2 and 3:

What is the minimum possible clearance between the parts 2 and 3 of the cross joint?

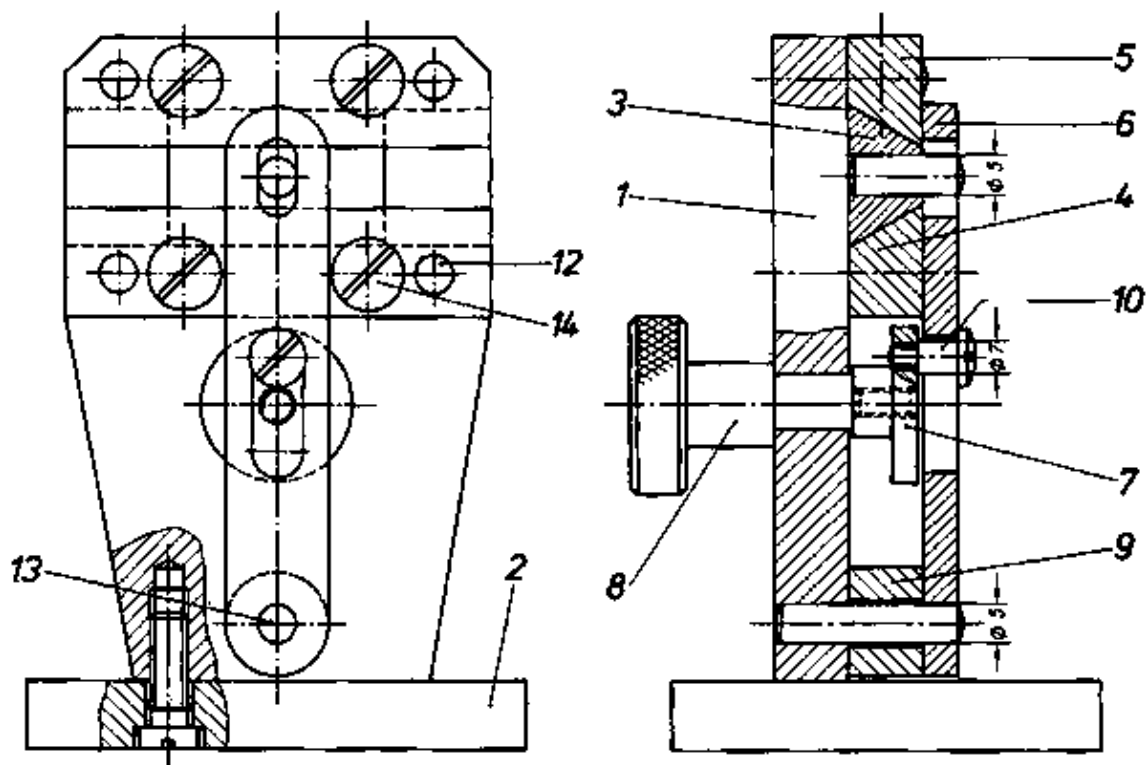
- A. 0 mm
- B. 0.1 mm
- C. 0.2 mm
- D. 0.3 mm
- E. 0.4 mm

A&D 21/1.3: How big is the lower off-size of the hole 8_{H7} ?

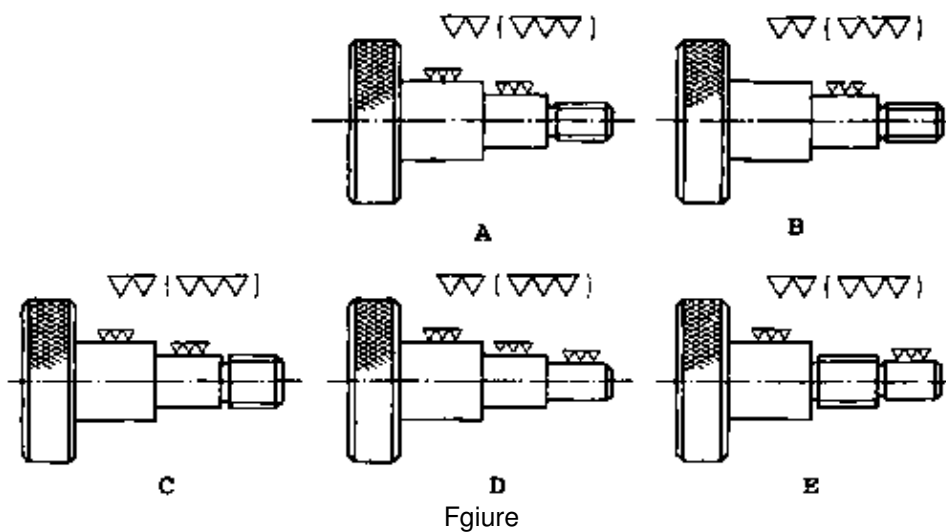
- A. 0
- B. +0.013
- C. +0.015
- D. 8.0
- E. 8.015

A&D 21/1.4: How big is the tolerance zone of the hole 8_{F7} ?

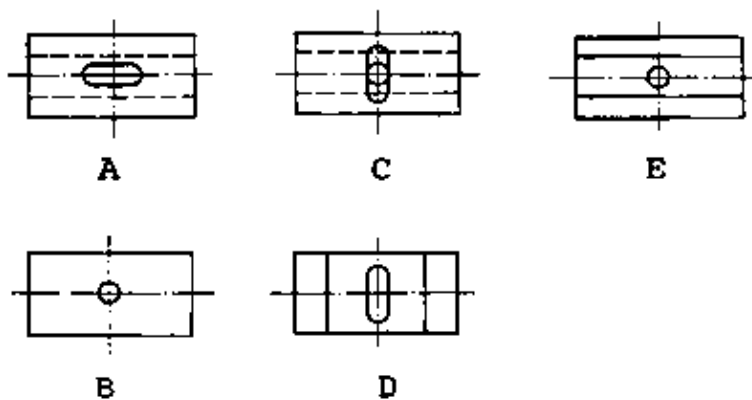
- A. 0.013
- B. 0.015
- C. 0.028
- D. 0.041
- E. 0.4



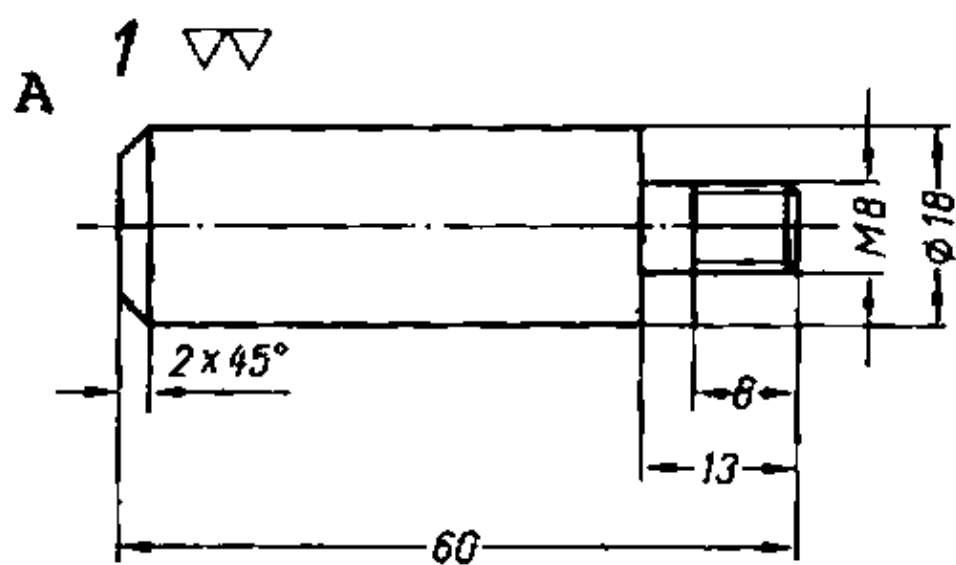
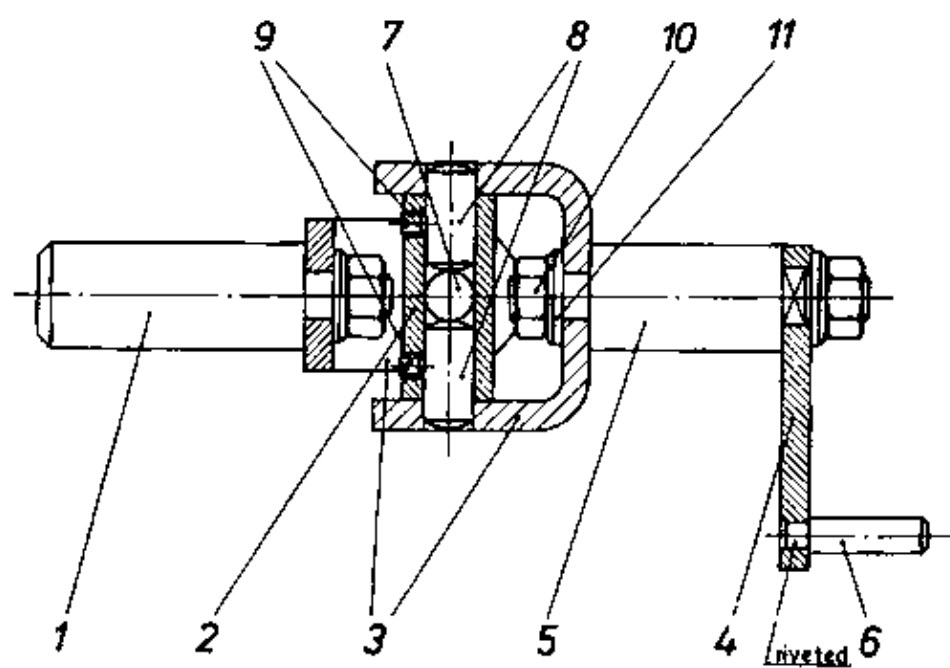
A&D 13.1: In which picture are the bolt and the surface symbols shown correctly?



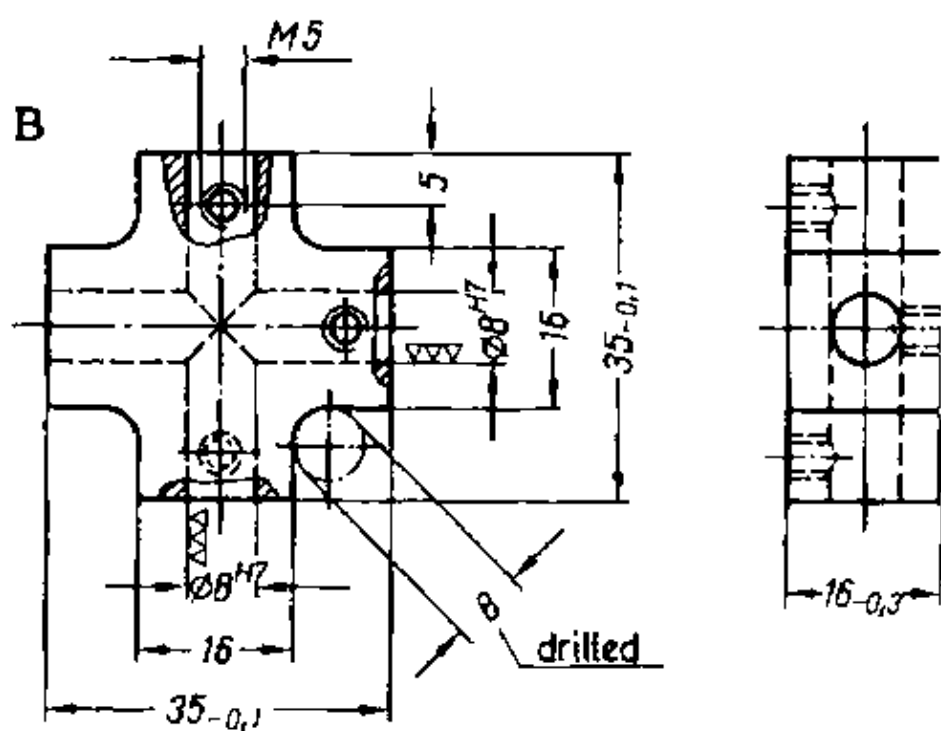
A&D 13.2: Which picture gives the correct representation of part 3?



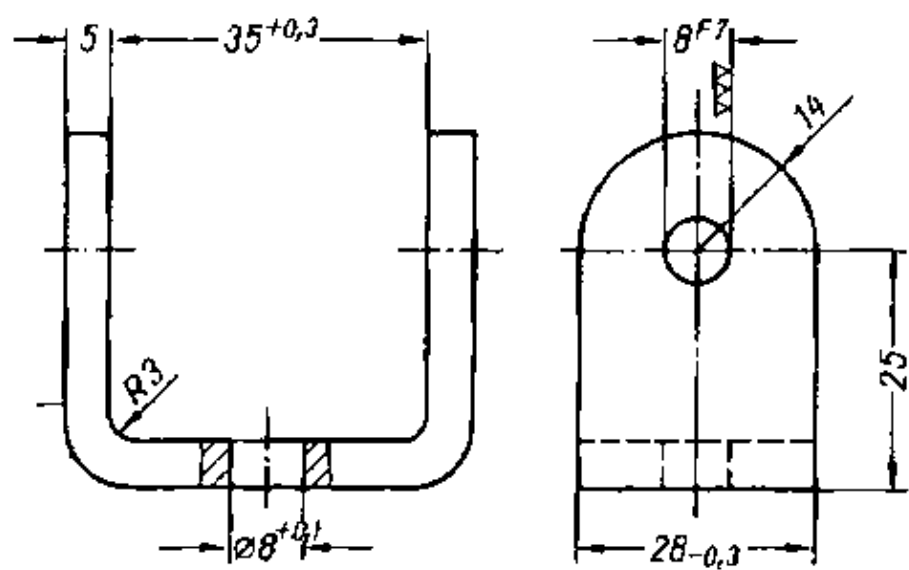
A&D 14.1: Which of the parts of the cross joint is not drawn correctly?

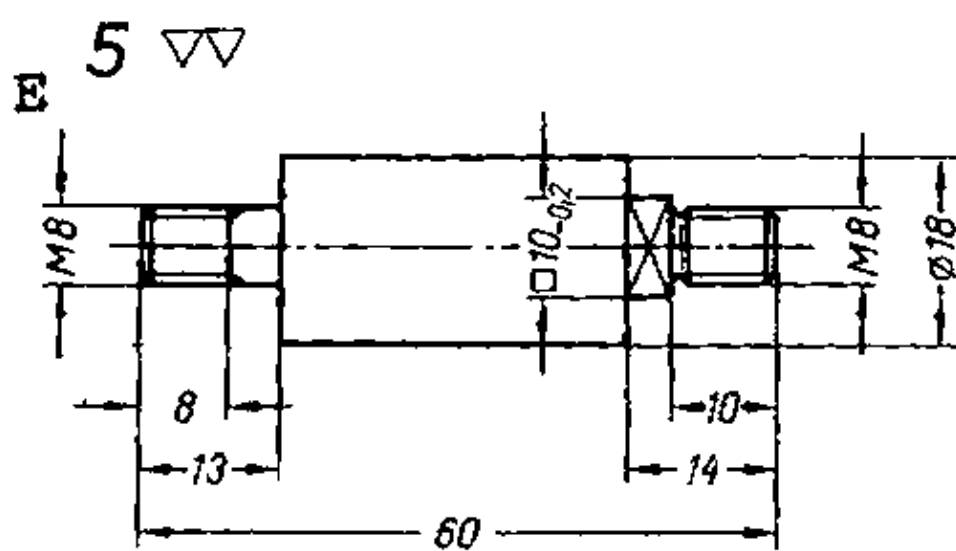
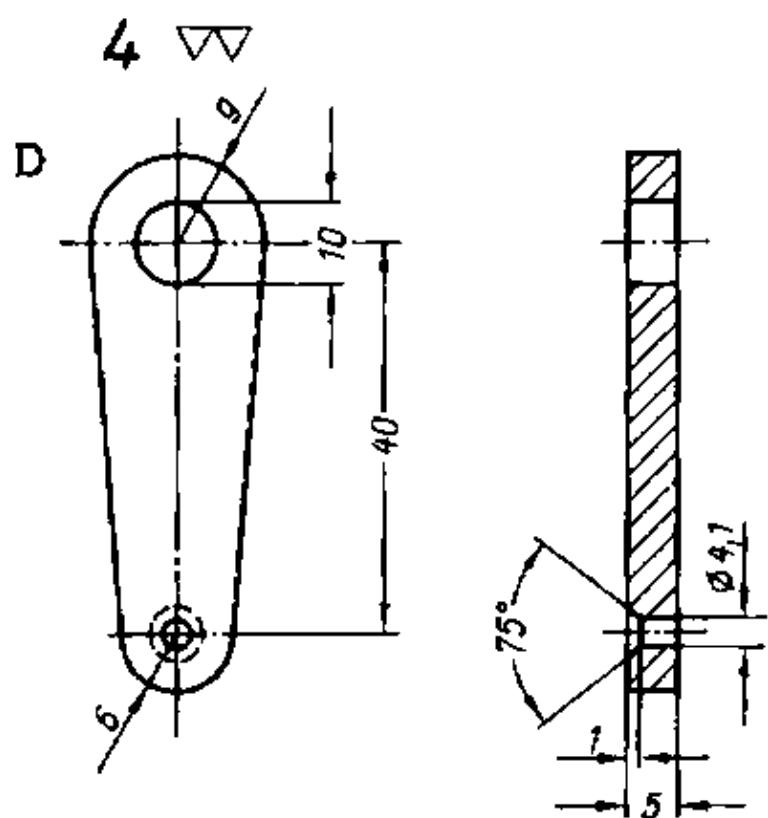


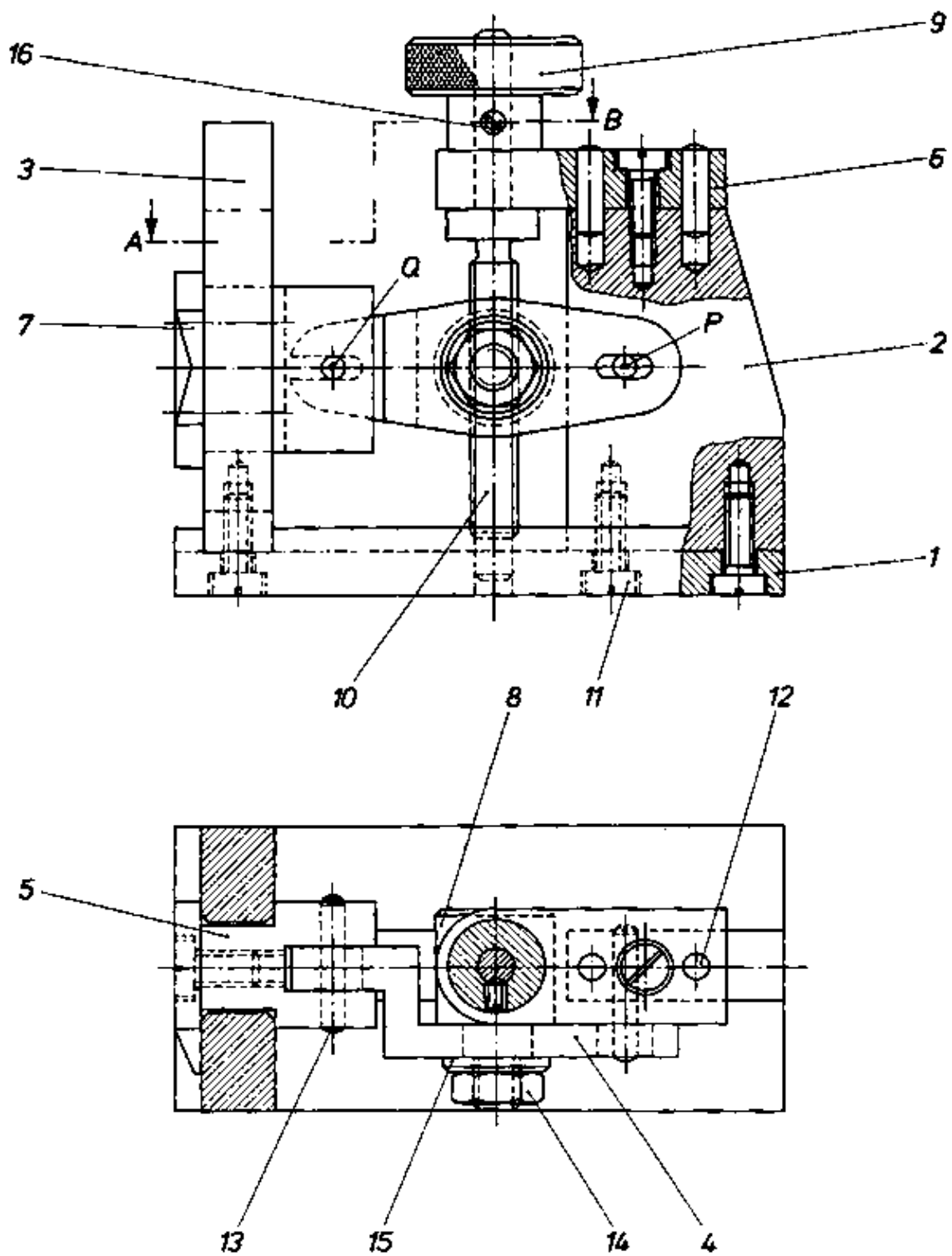
2 $\nabla \nabla (\nabla \nabla \nabla)$



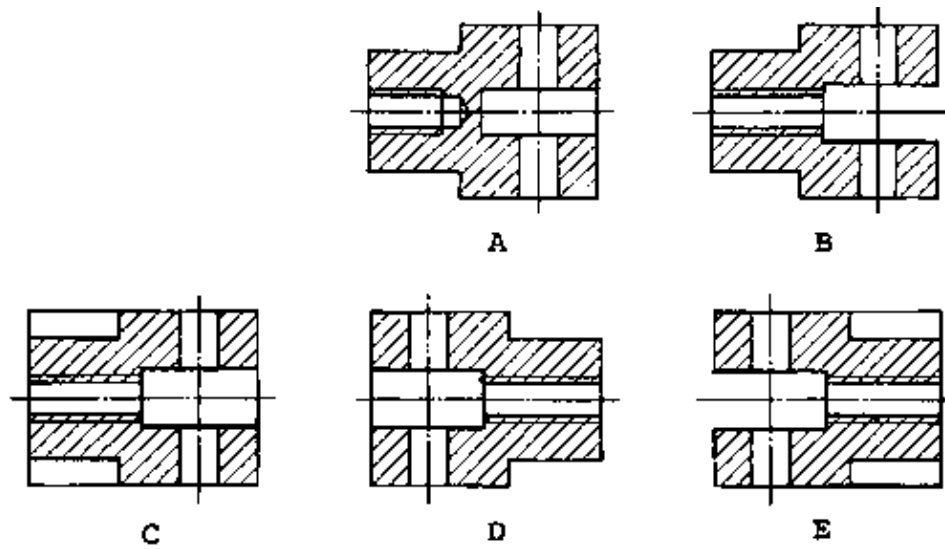
c 3 $\nabla \nabla (\nabla \nabla \nabla)$



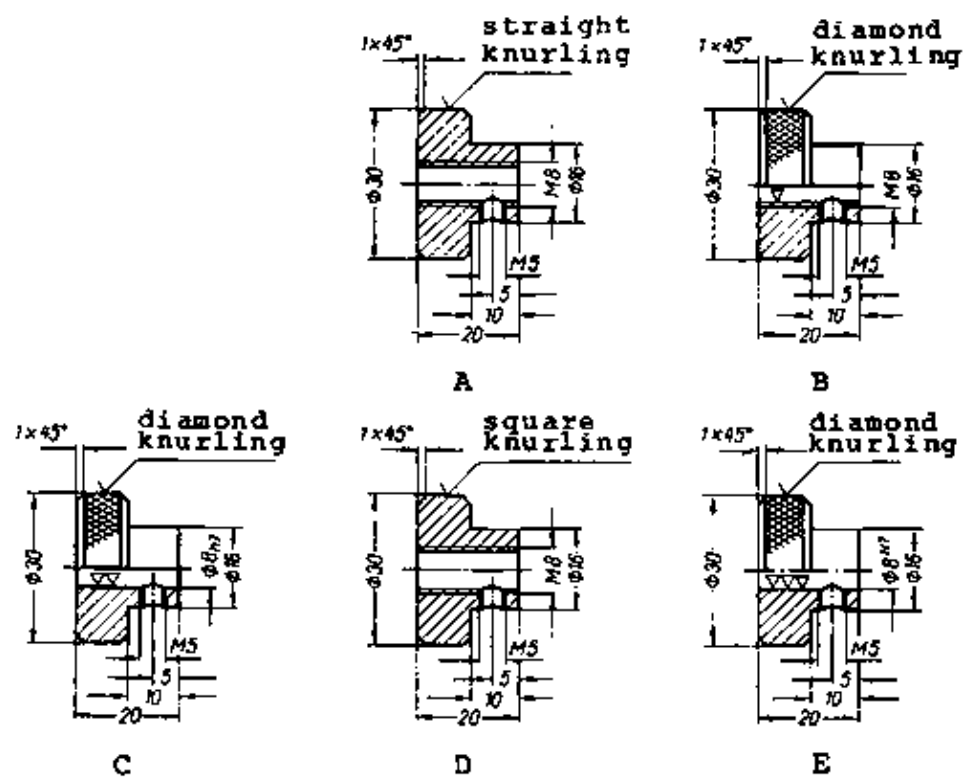




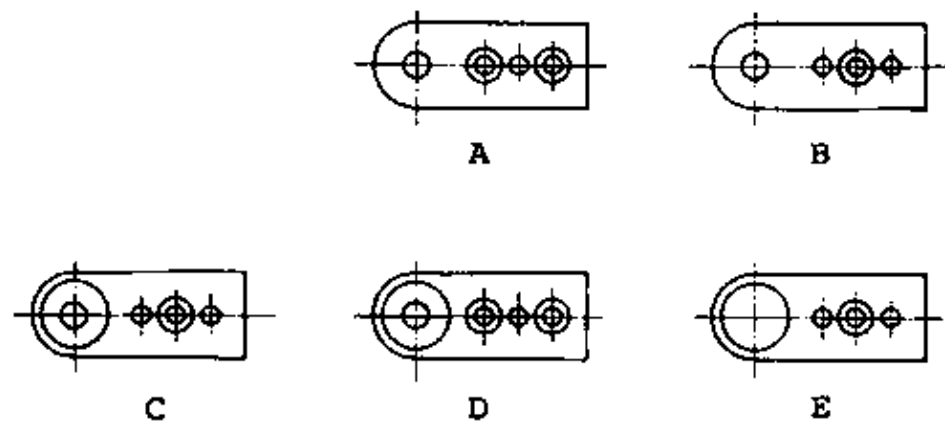
A&D 15/1.1: Which of the pictures shows the correct sectional representation of part 5?

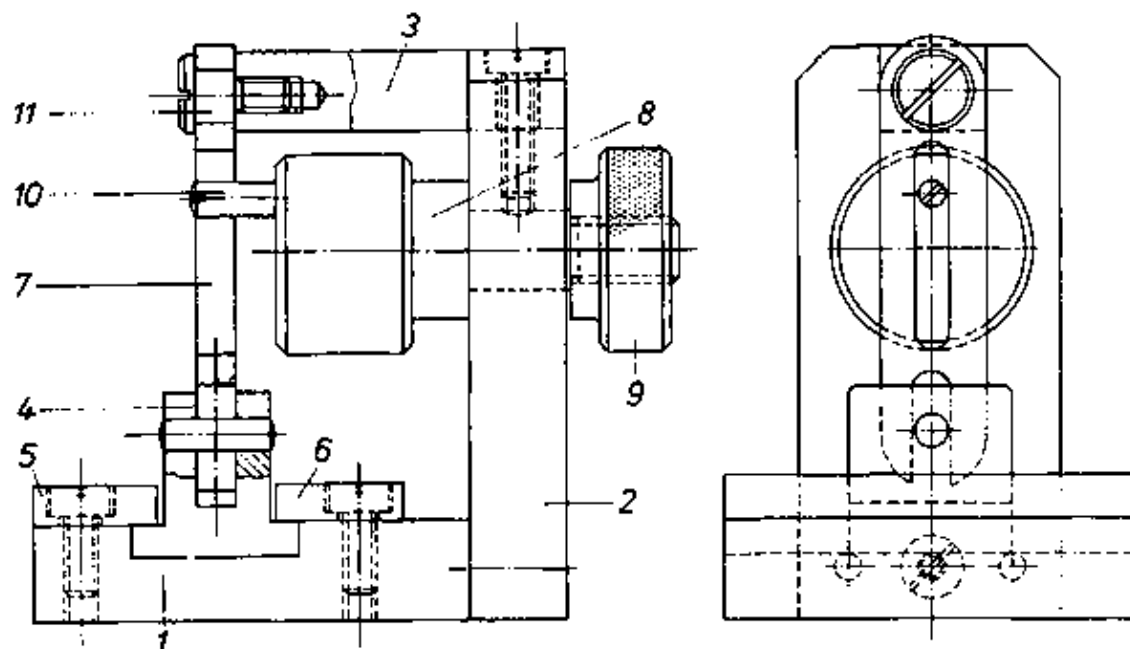


A& D 15/1.2: Which of the pictures shows part 9 in correct representation and with correct dimensions?



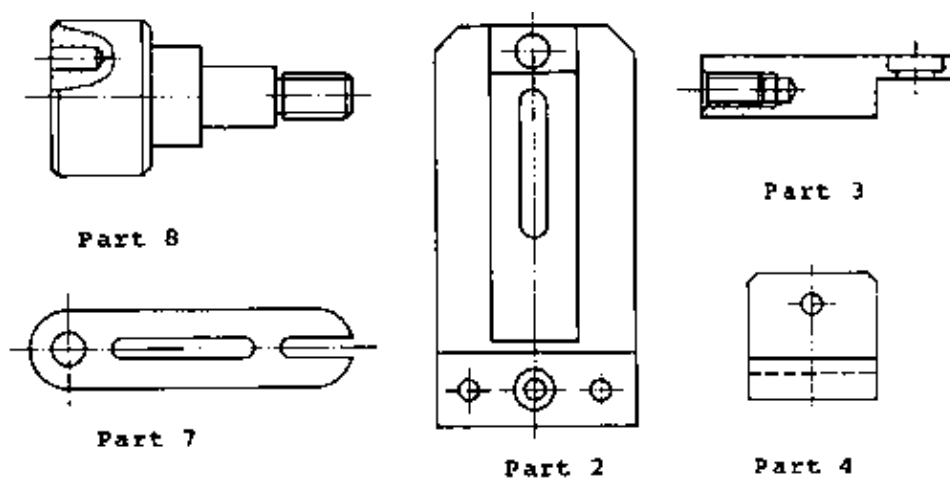
A&D 15/1.3: Which of the pictures shows part 6 correctly?



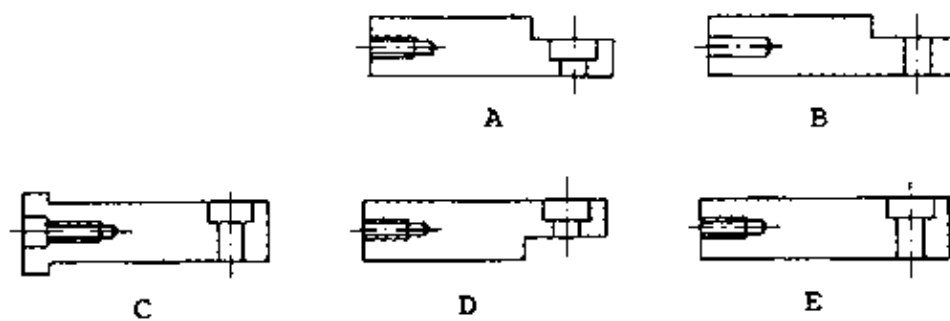


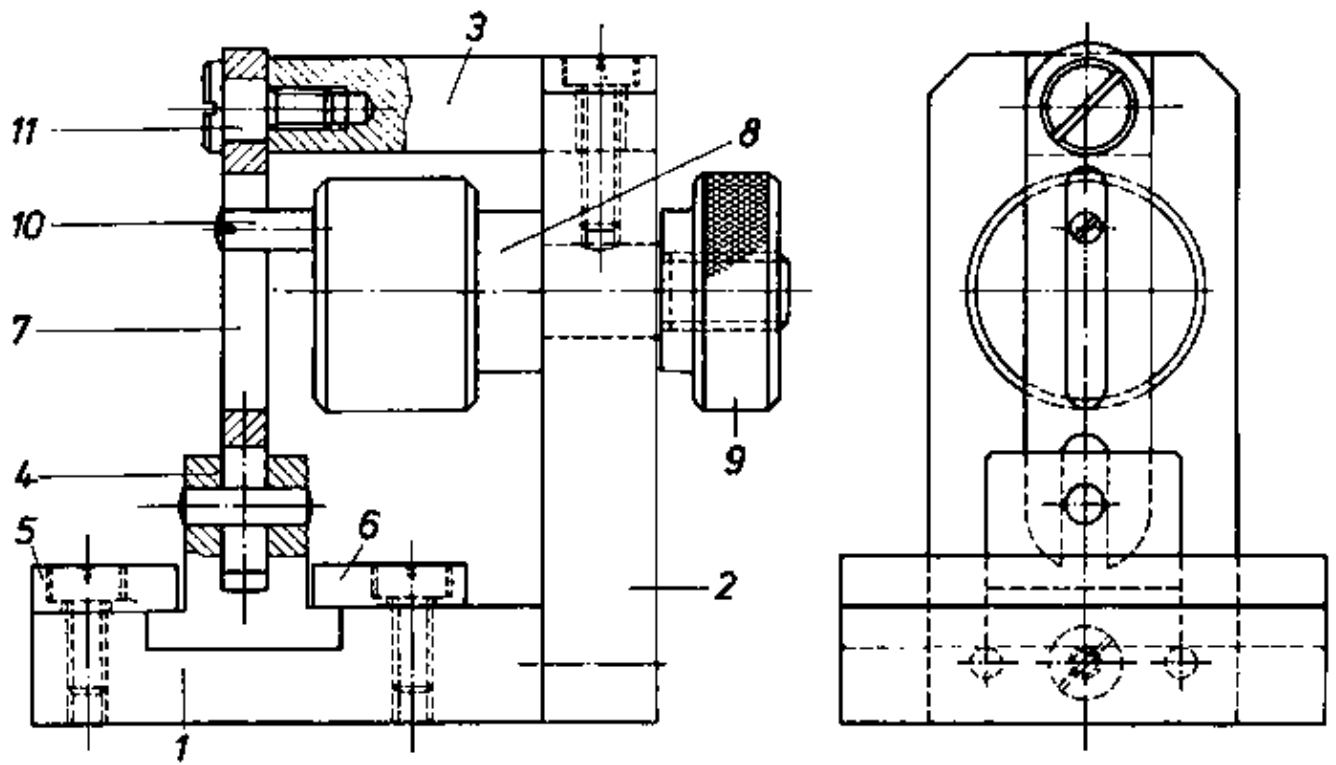
A&D 16.1: Which of the five details is shows according to the above assembly drawing?

- A: Part 2
- B: Part 3
- C: Part 4
- D: Part 7
- E: Part 8

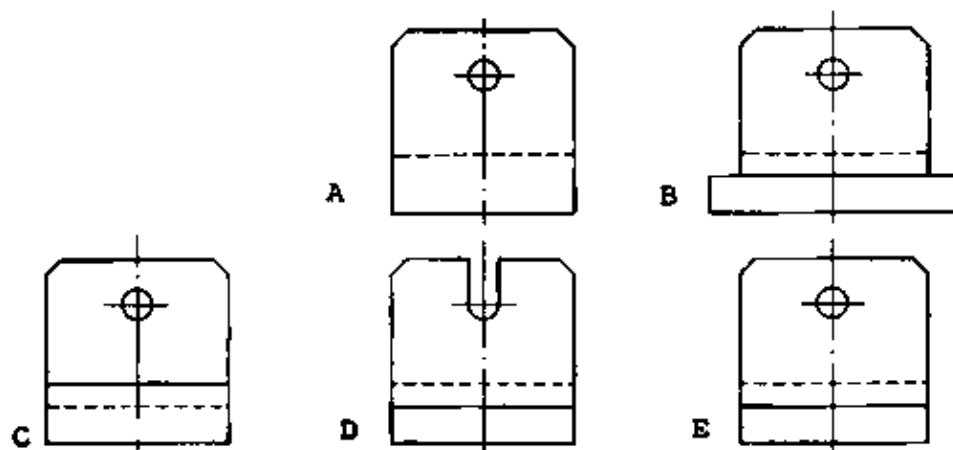


A&D 16.2: Which of the pictures gives a correct sectional view of part 3?

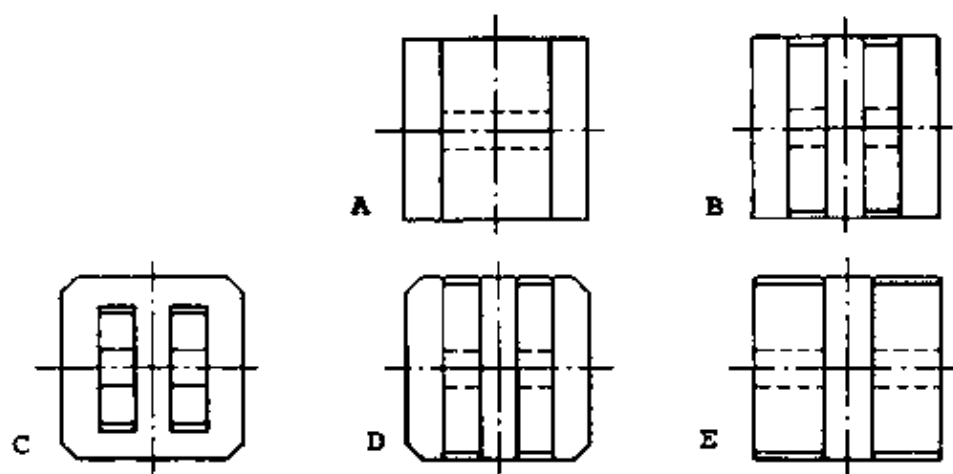


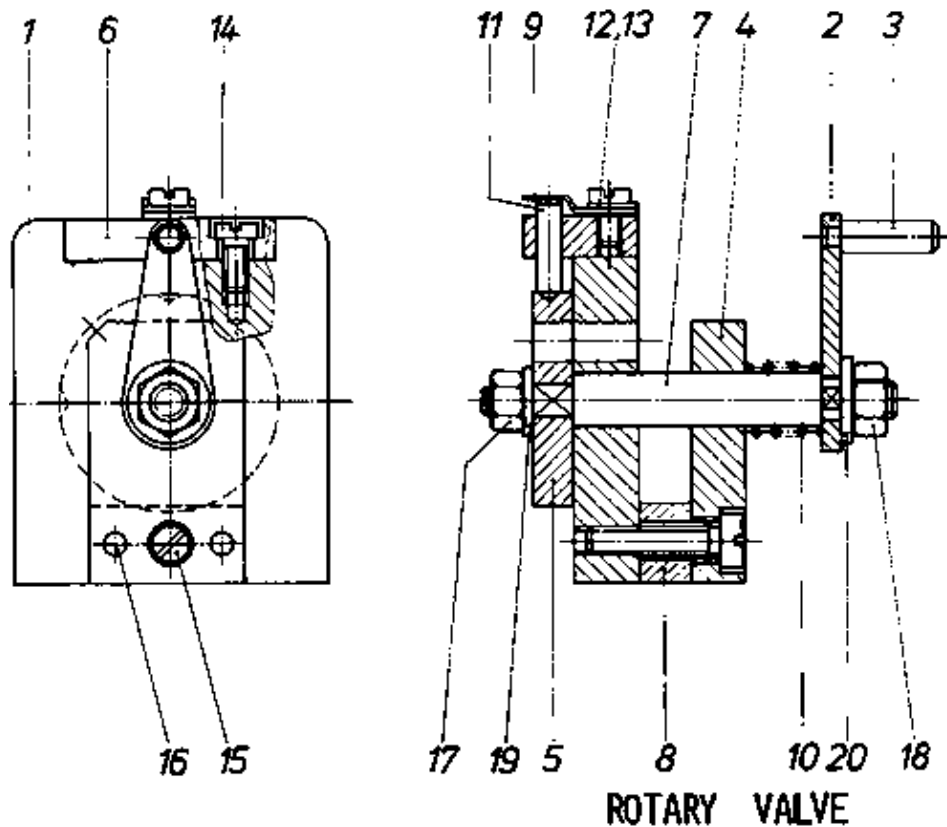


A&D 17.1: Which picture gives a correct representation of part 4?



A&D 17.2: In which picture is the plan view of part 4 shown correctly?





A&D 18.1: How many cheese head screws are necessary for the assembly of this workpiece?

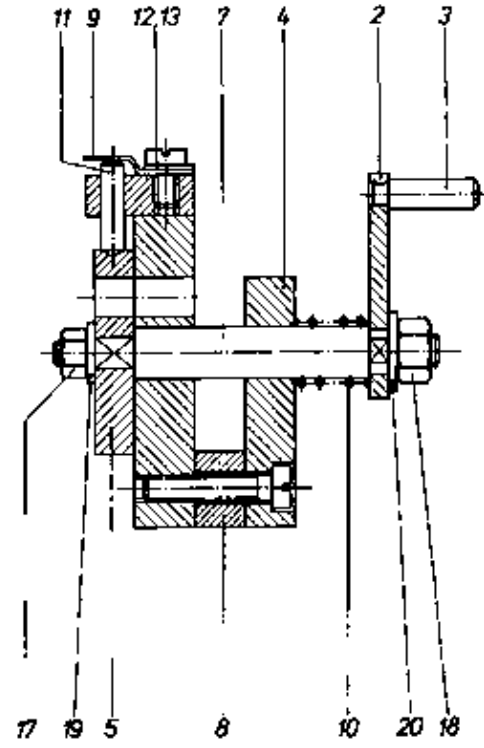
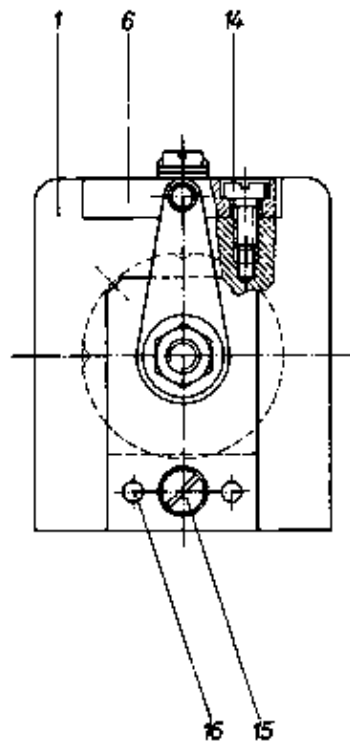
- A. 2 pieces
- B. 3 pieces
- C. 4 pieces
- D. 5 pieces
- E. 6 pieces

A&D 18.2: How many parallel pins are necessary for the assembly of this workpiece?

- A. 2 pieces
- B. 3 pieces
- C. 4 pieces
- D. 5 pieces
- E. 6 pieces

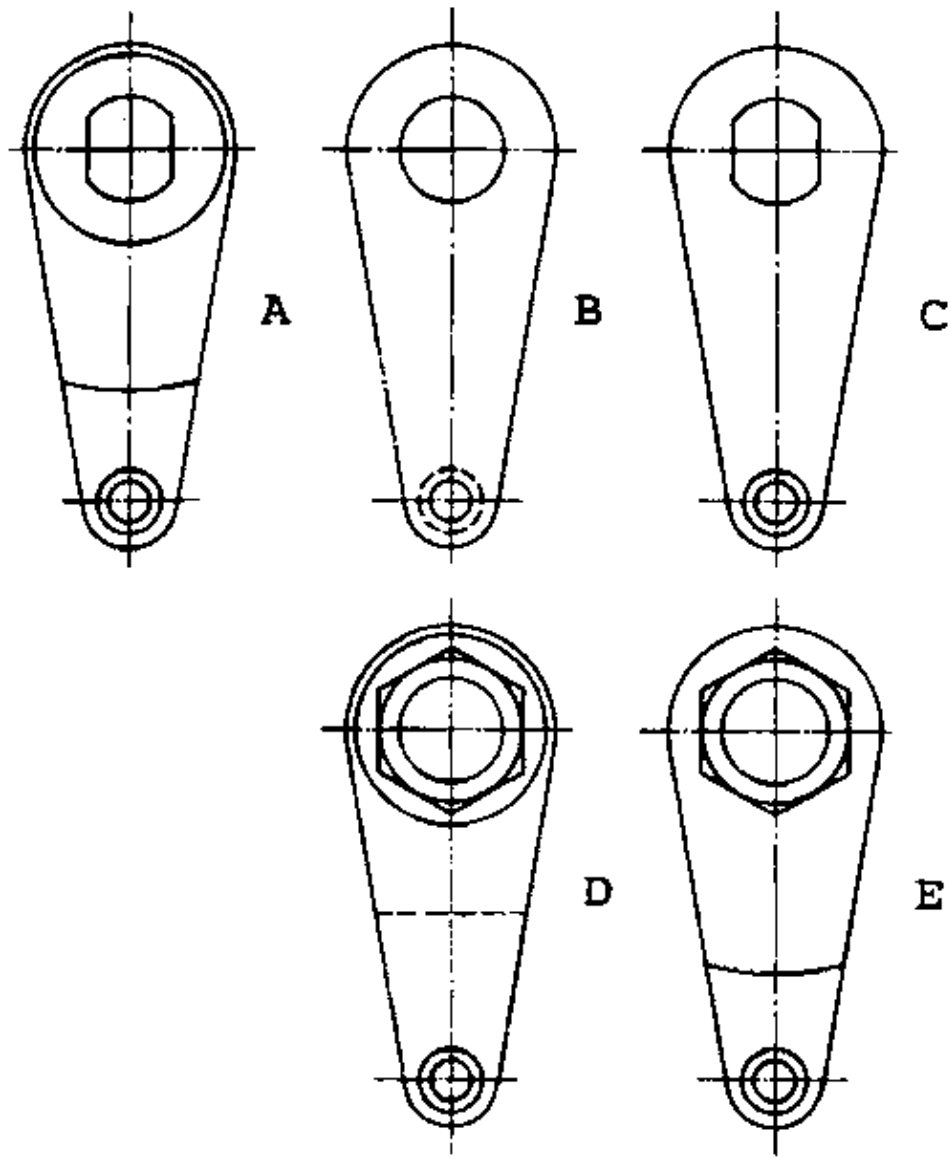
A&D 18.3: What does the diagonal cross in the representation of part 7 indicate?

- A. Force Fit
- B. The surface has to be given a very good finishing.
- C. A brazed joint
- D. The part is not shown in the correct size.
- E. A plain surface



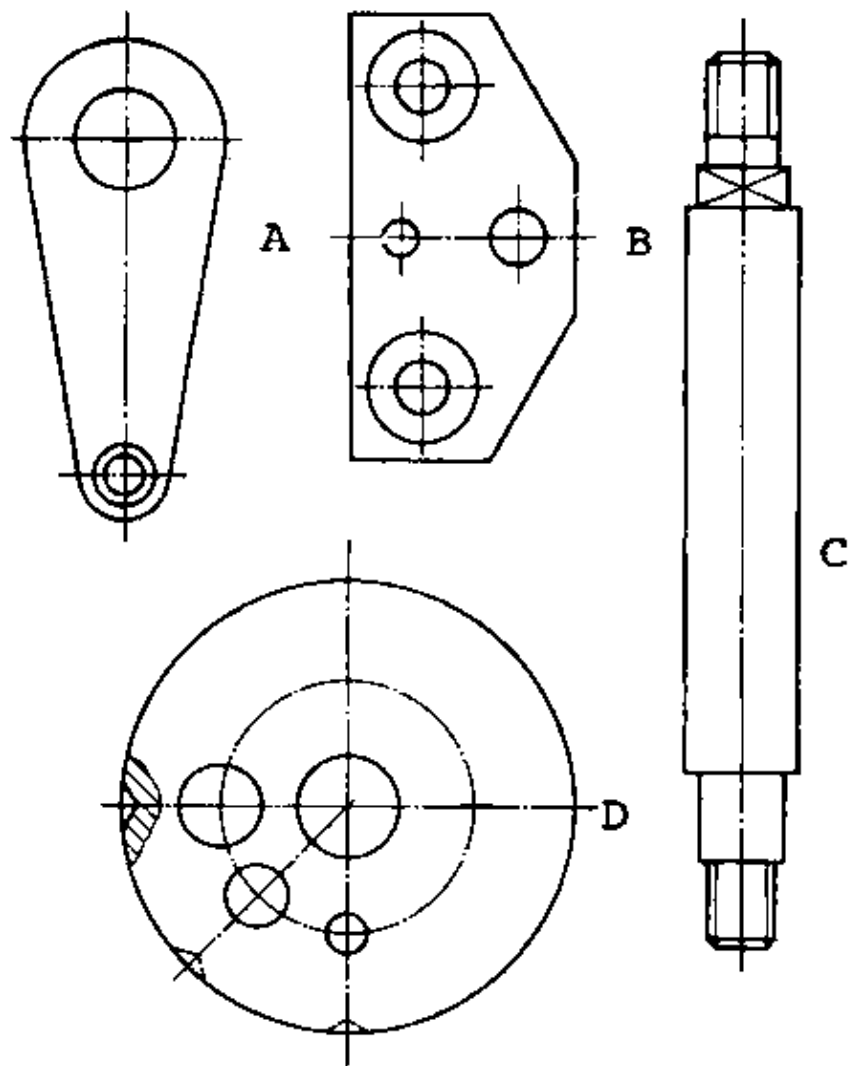
ROTARY VALVE

A&D 19/1.1: Which picture gives a correct representation of part 2?

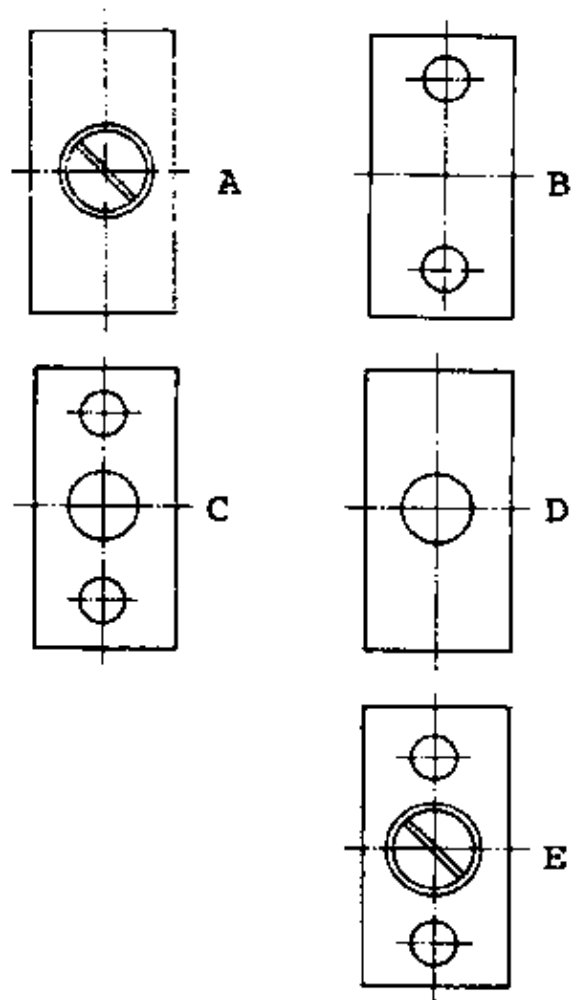


A&D 19/1.2: Which of the details is in accordance with the assembly drawing?

- A. part 2
- B. part 6
- C. part 7
- D. part 5
- E. none of them

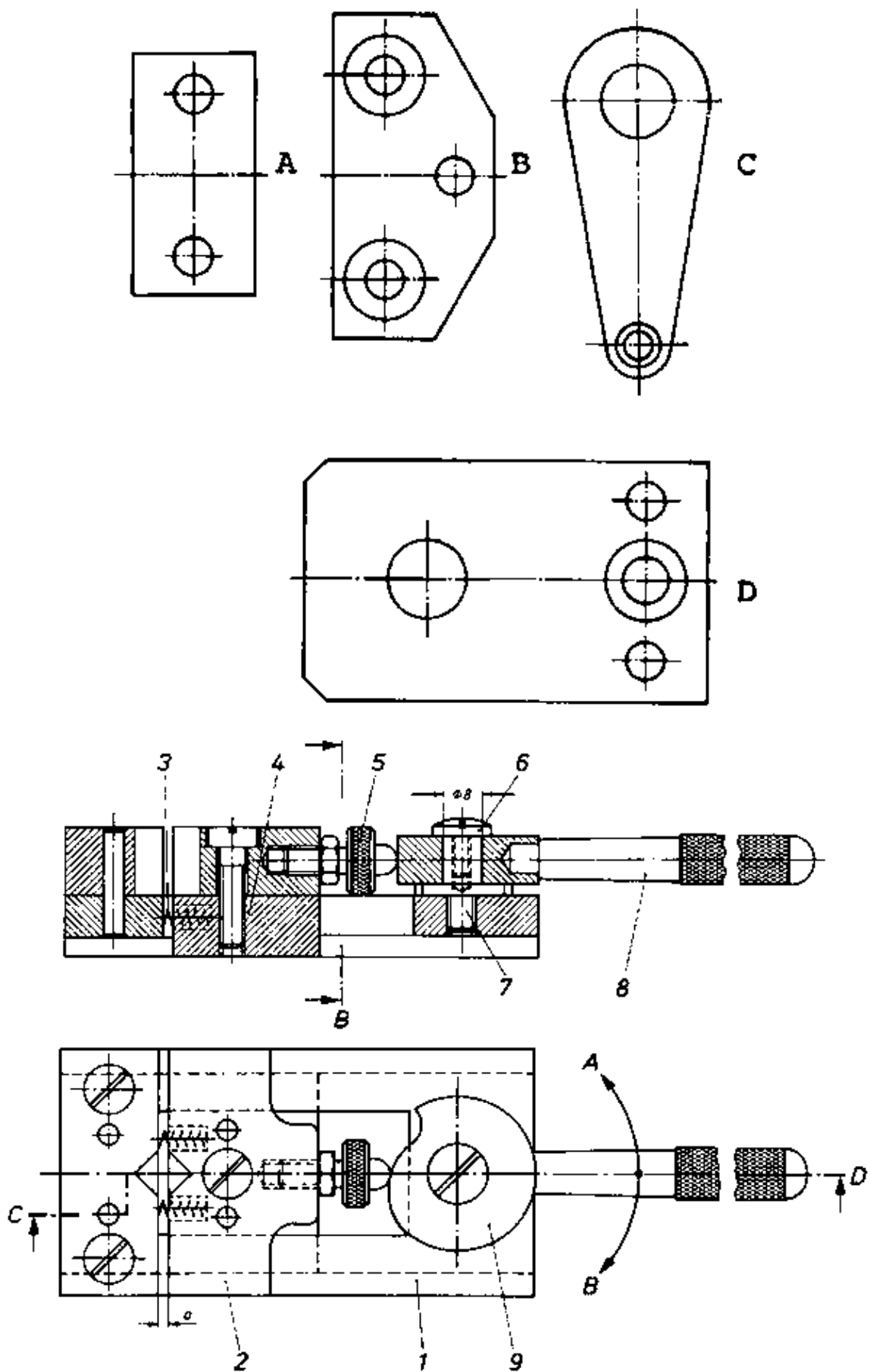


A&D 19/1.3: Which of the pictures shows a correct representation of part 8?

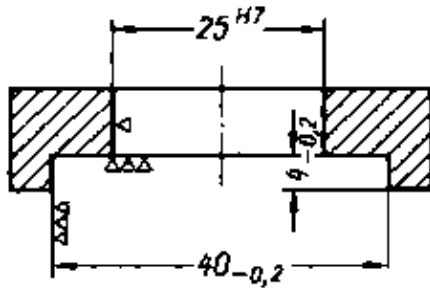


A&D 19/1.4: Which of the details is shown in accordance with the assembly drawing?

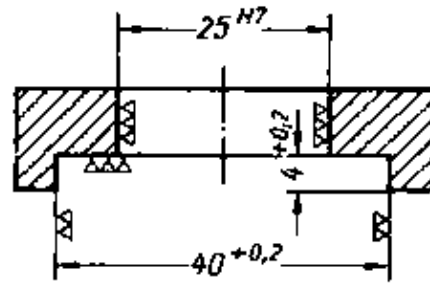
- A. part 8
- B. part 6
- C. part 2
- D. part 4



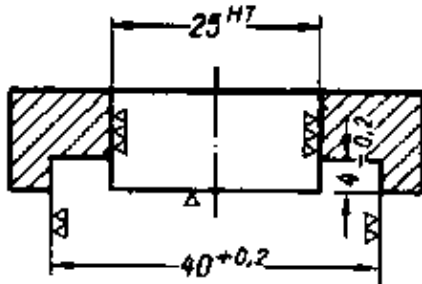
A&D 20.1: Which of the pictures gives a correct representation of the section A–B of the base plate (part 1) with correct tolerances and surface symbols?



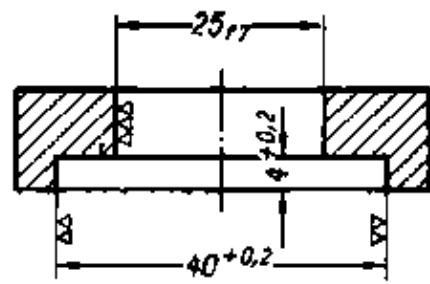
A



B

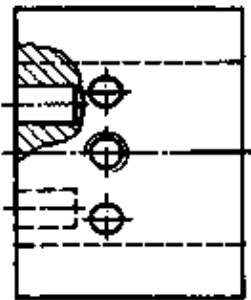


C

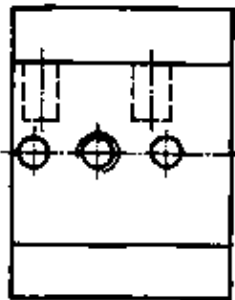


D

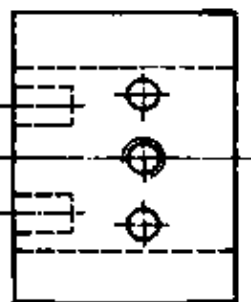
A&D 20.2: Which of the pictures shows the plan view of part 4 correctly?



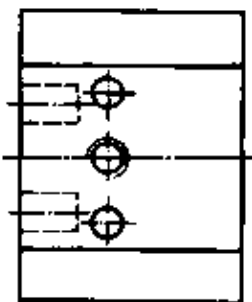
A



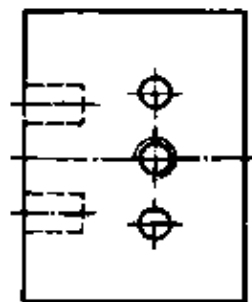
B



C

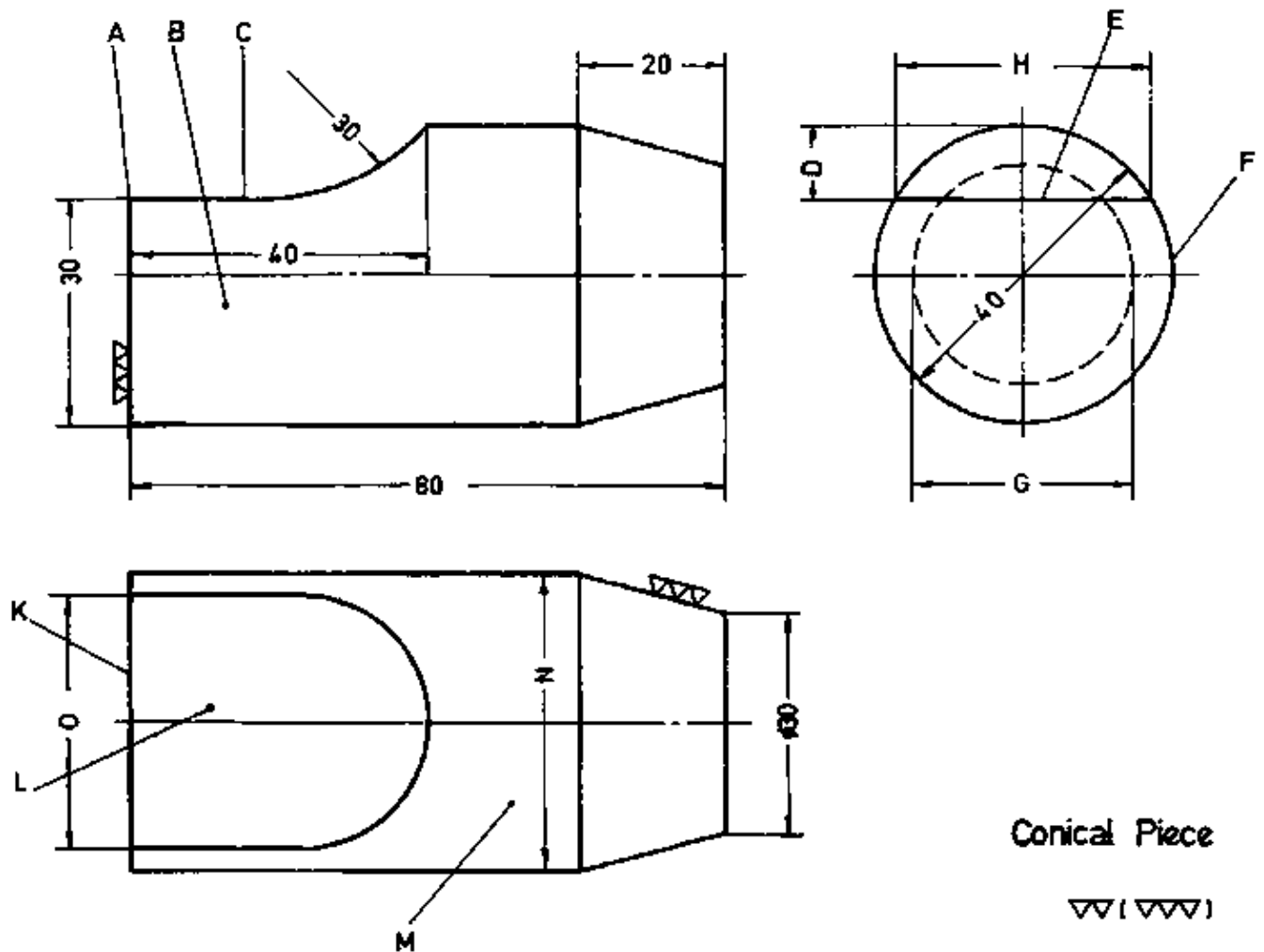


D



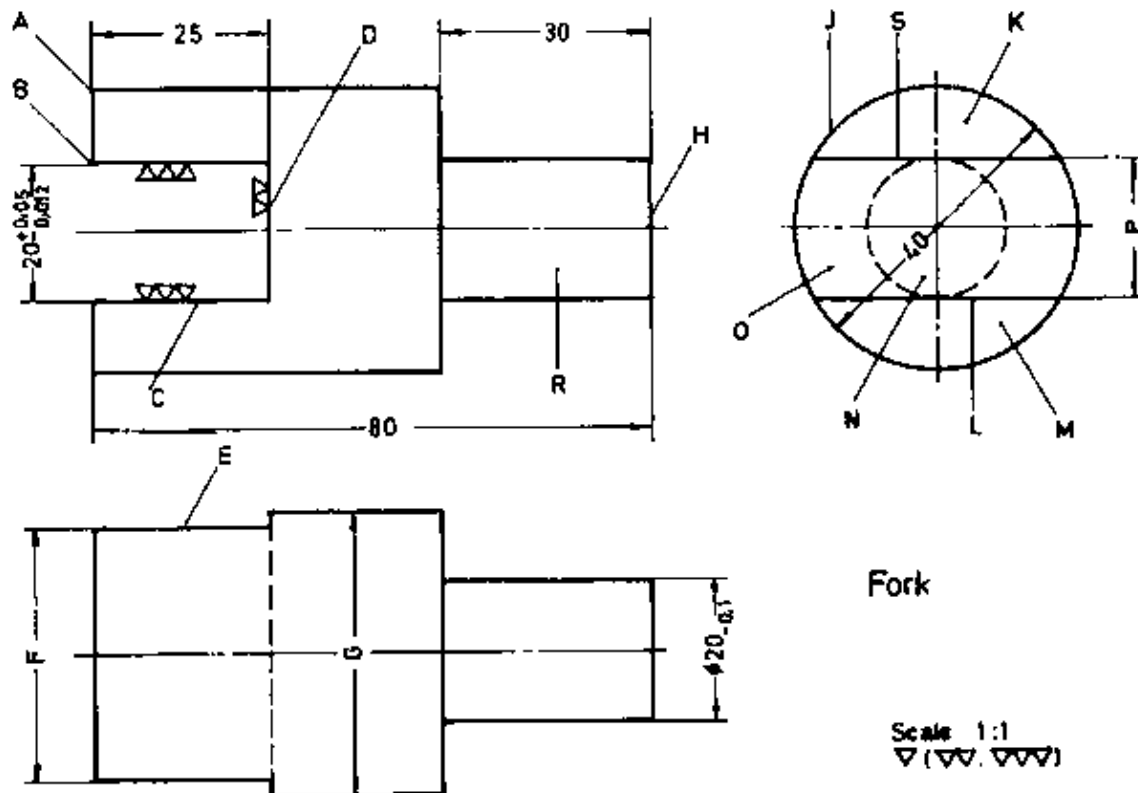
E

READING OF DRAWINGS



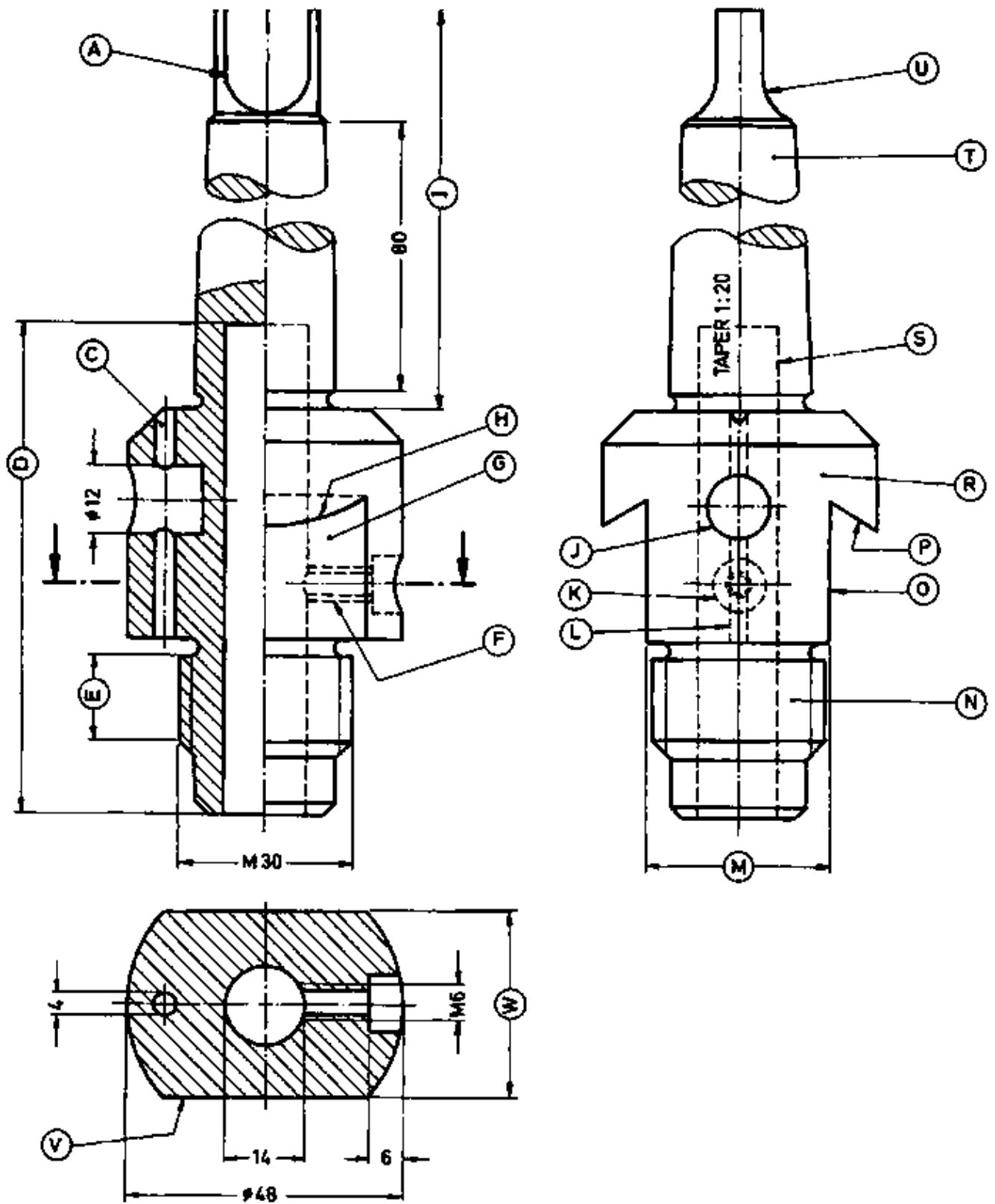
Fill in the blanks:

1. Surface "L" (plan view) is represented in the elevation view by line.....
2. Dimension "N" (plan view) is.....mm.
3. Dimension "D" (side view) is.....mm.
4. Surface "M" (plan view) is represented in the side view by line.....
5. Dimension "O" (plan view) is represented in the side view by dimension.....



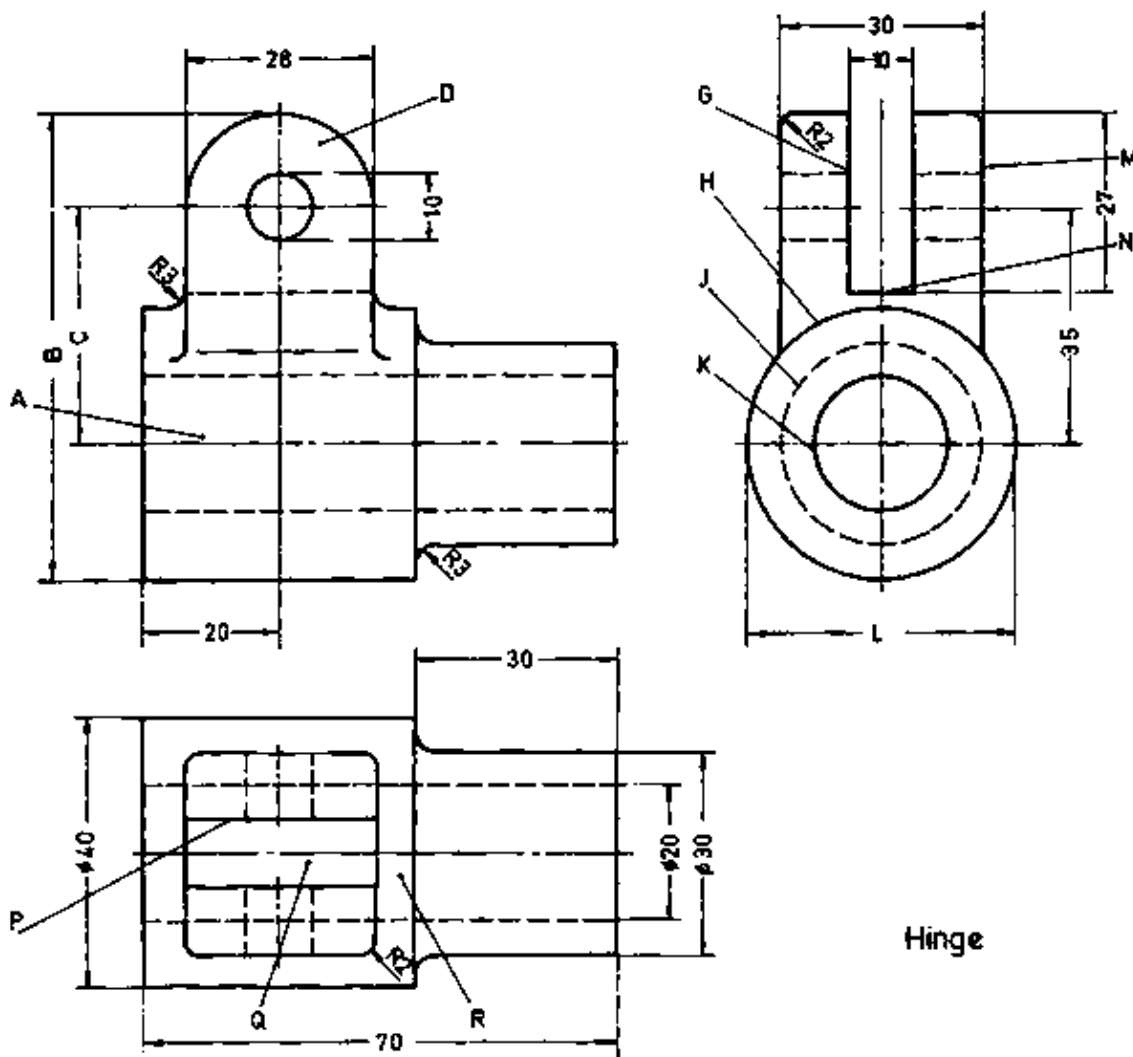
Fill in the blanks:

1. Distance "P" in the side view is allowed to vary between..... and.....mm.
2. The quality of surface R (elevation view) is represented by.....
3. Edge "B" (elevation view) is represented in the side view by line.....
4. The lower off-size of dimension " $20_{-0.1}$ " is.....mm.
5. Dimension "G" (plan view) is.....mm.



Fill in the blanks:

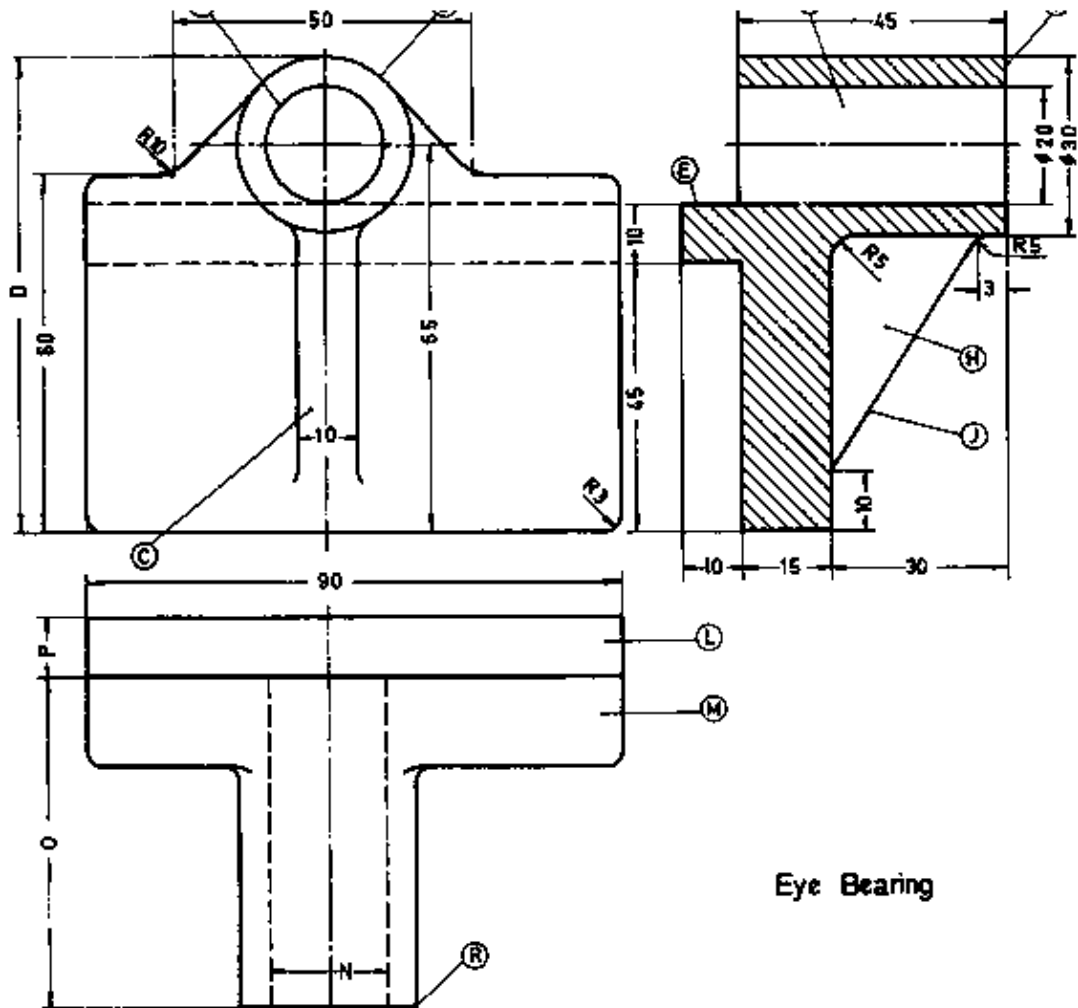
1. The circular cutter has a tapered shank. The shank is marked by letter.....
2. The overall length of the shank is indicated by the letter.....
3. The taper ratio of the tapered portion is.....
4. The length of the taper is.....mm.
5. The edge "U" in the side view is represented in the elevation view by line.....



Hinge

Fill in the blanks:

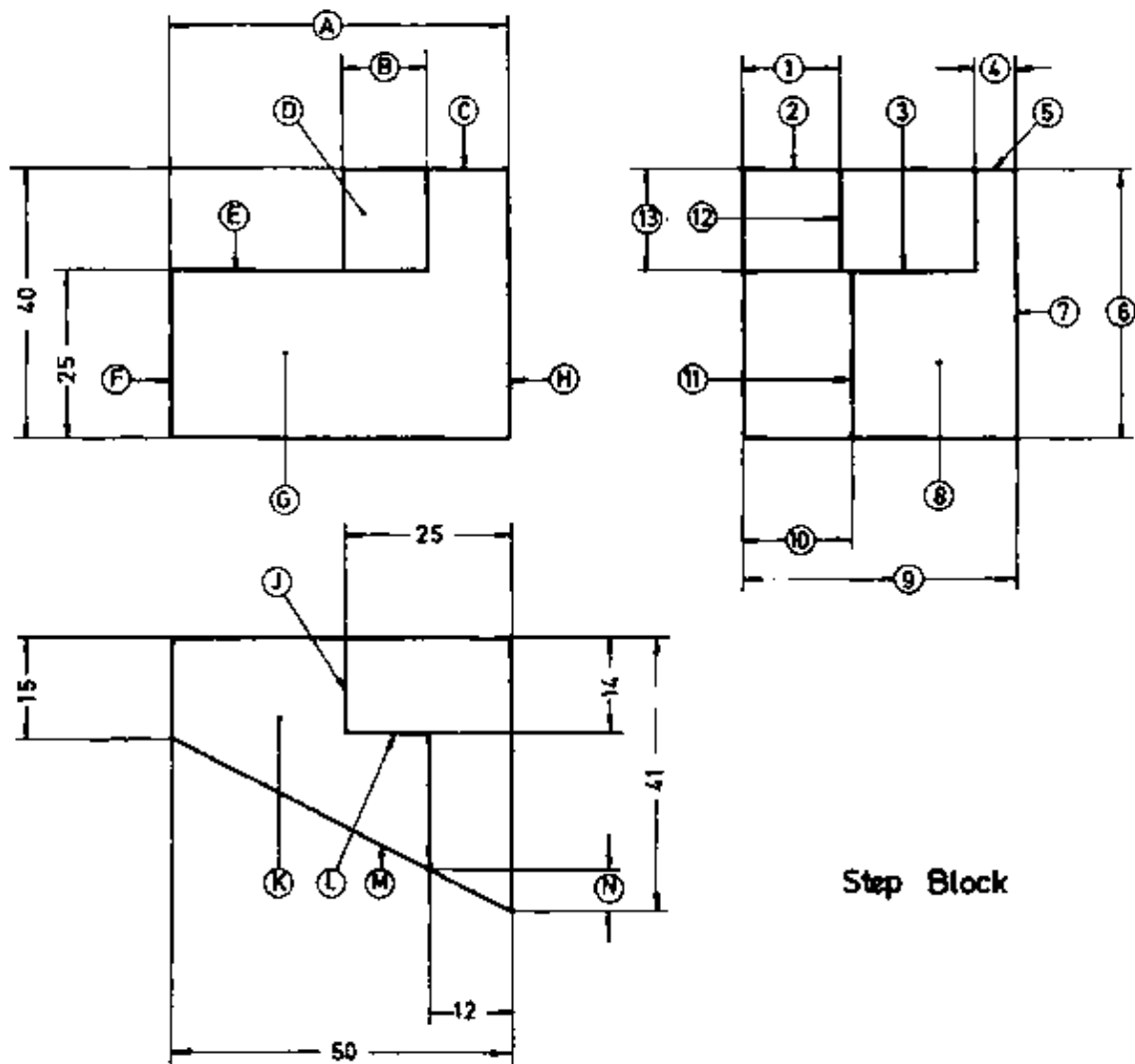
1. Dimension "B" (elevation view) is.....mm.
2. Dimension "C" (elevation view) is.....mm.
3. Surface "N" (side view) is represented in the plan view by.....
4. Surface "A" (elevation view) is represented in the side view by line.....
5. Surface "D" (elevation view) is represented in the side view by line.....



Eye Bearing

Fill in the blanks:

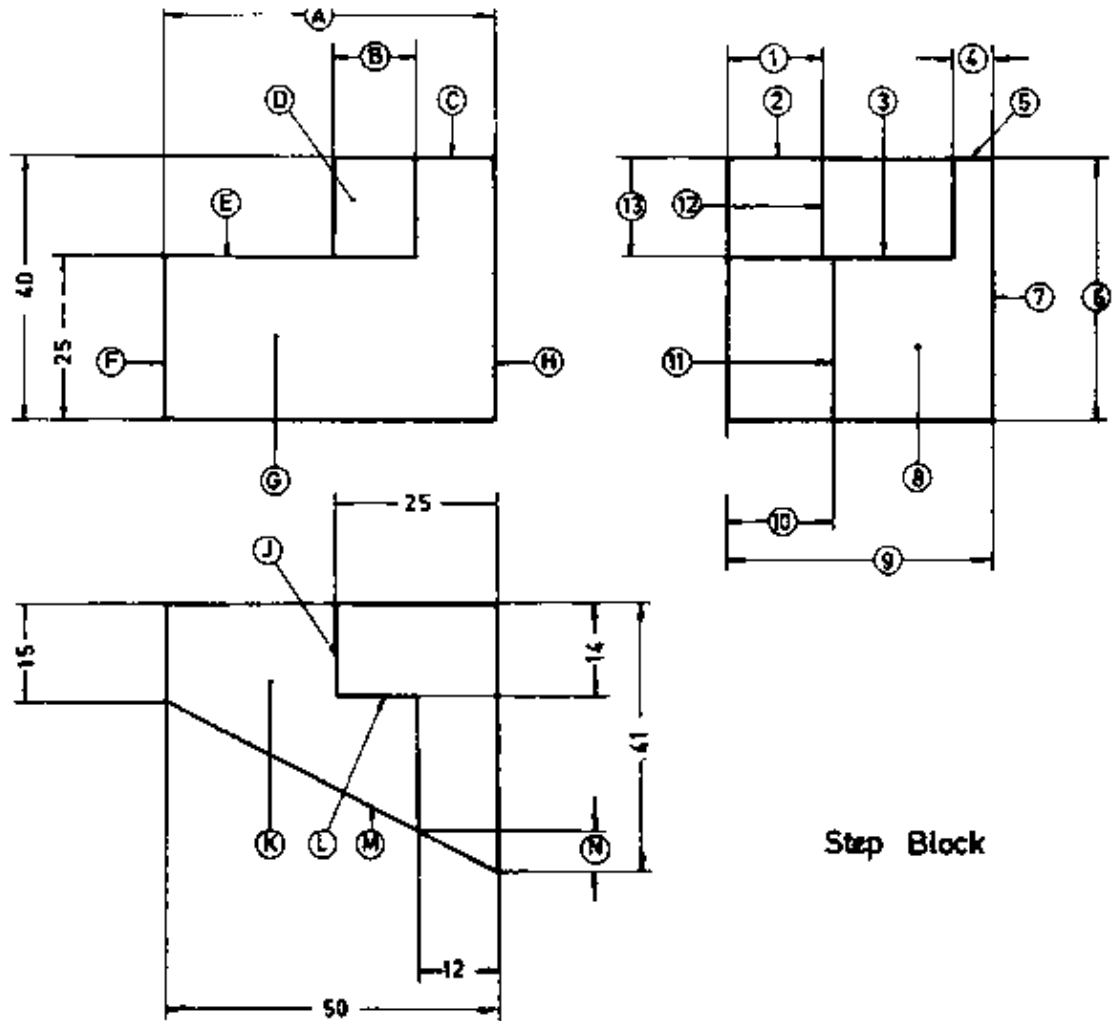
1. Surface "C" (elevation view) is represented in the side view by line.....
2. Surface "E" (side view) is represented in the plan view by.....
3. Dimension "D" (elevation view) is.....mm.
4. Dimension "P" (plan view) is..... mm.
5. Edge "R" (plan view) is represented in the elevation view by.....



Step Block

Fill in the blanks:

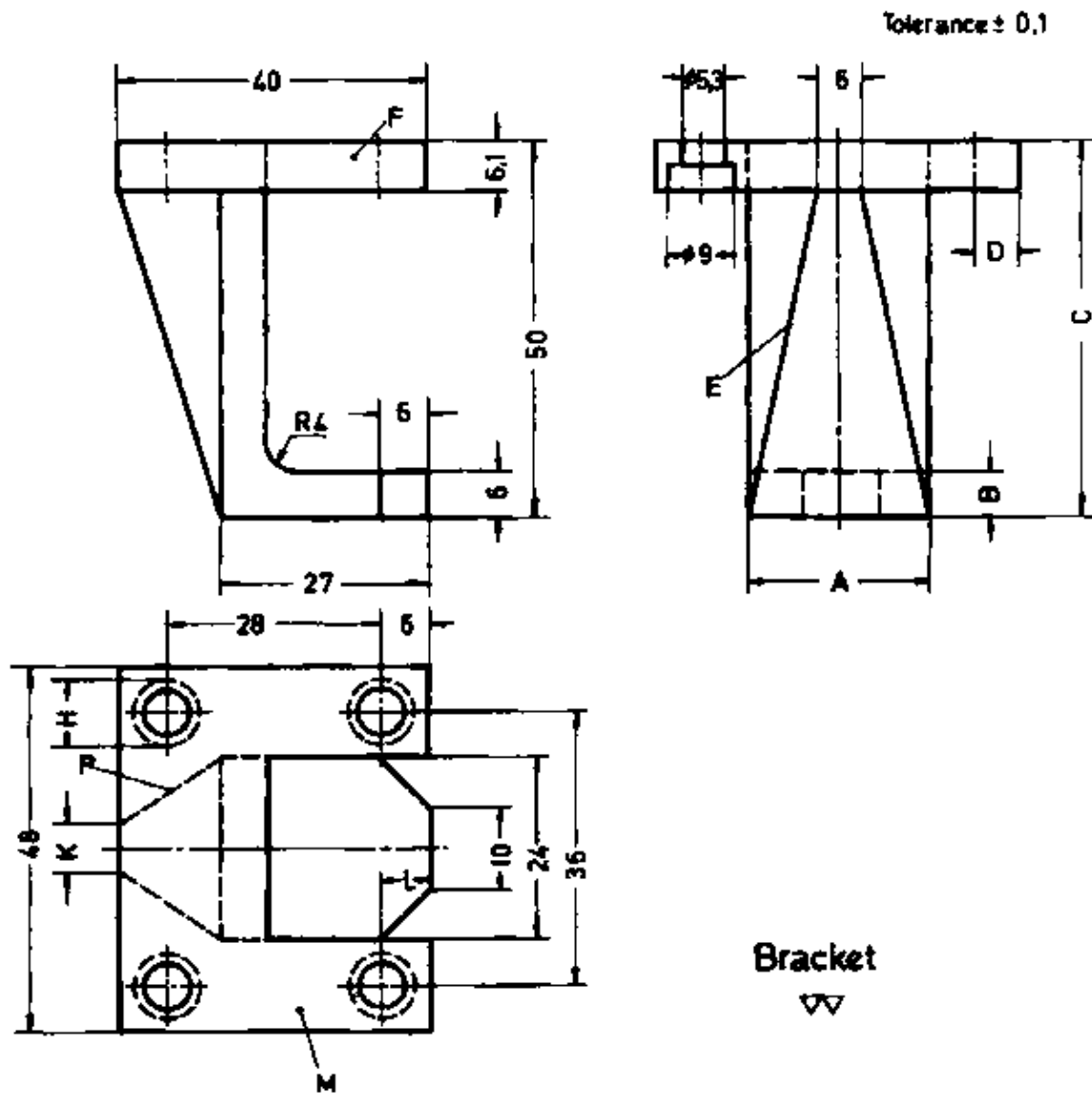
1. Dimension "B" in the elevation view is.....mm.
2. Dimension "4" (side view) is represented in the plan view by letter.....
3. Surface "G" (elevation view) is represented in the side view by number.....
4. Edge "E" (elevation view) is represented in the side view by number.....
5. Edge "5" (side view) is represented in the elevation view by letter.....



Step Block

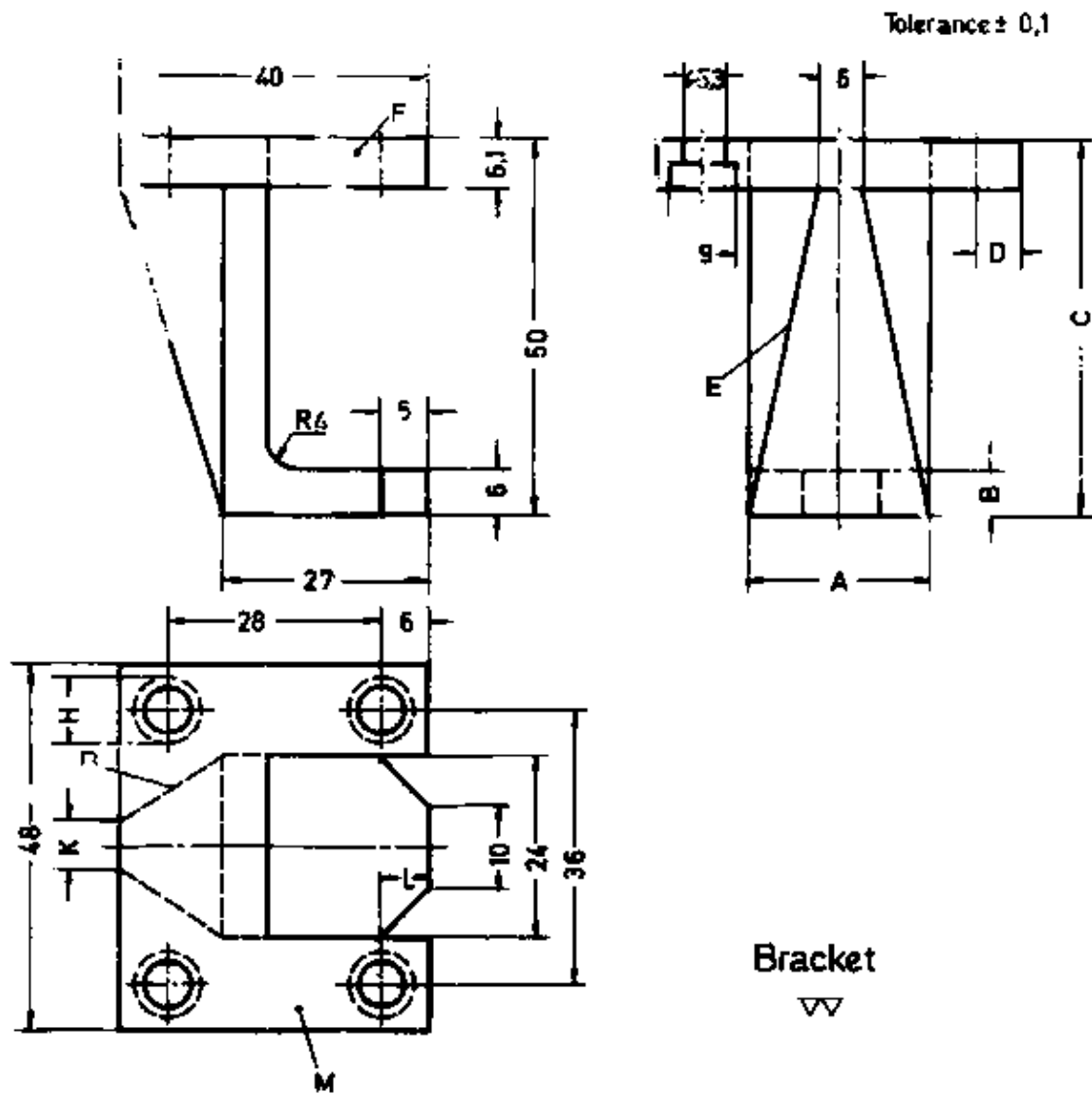
Fill in the blanks:

1. Surface "8" (side view) is represented in the plan view by line.....
2. Edge "H" (elevation view) is represented in the side view by line.....
3. Edge "2" (side view) is represented in the plan view by line.....
4. Surface "D" (elevation view) is represented in the side view by line.....
5. Edge "11" (side view) is represented in the elevation view by line.....



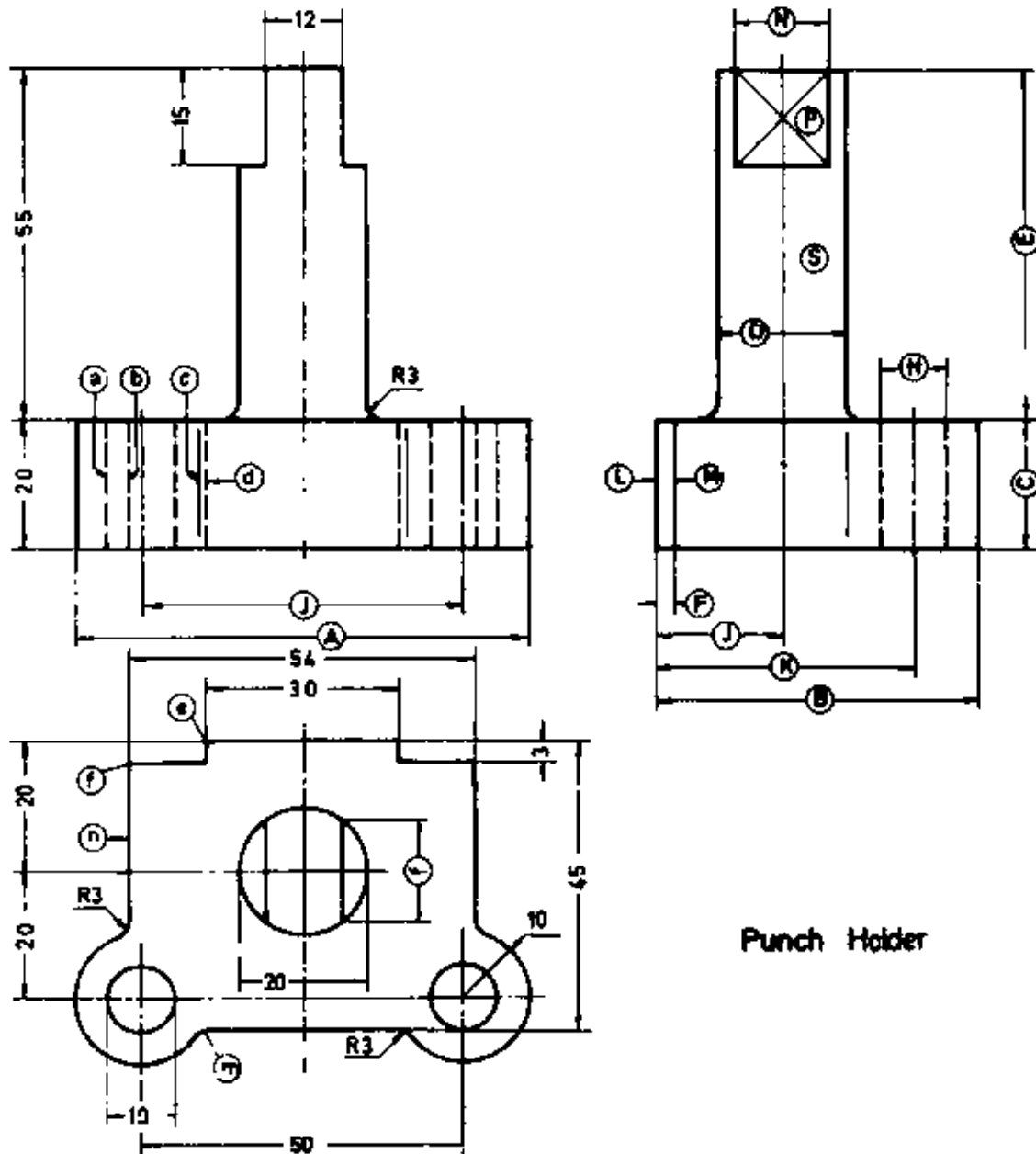
Fill in the blanks:

1. Upper portion "F" (elevation view) is represented in the plan view by letter.....
2. Edge "E" (side view) is marked in the plan view by letter
3. Dimension "H" (plan view) is.....mm.
4. Dimension "K" (plan view) is.....mm.
5. Dimension "L" (plan view) is.....mm.



Fill in the blanks:

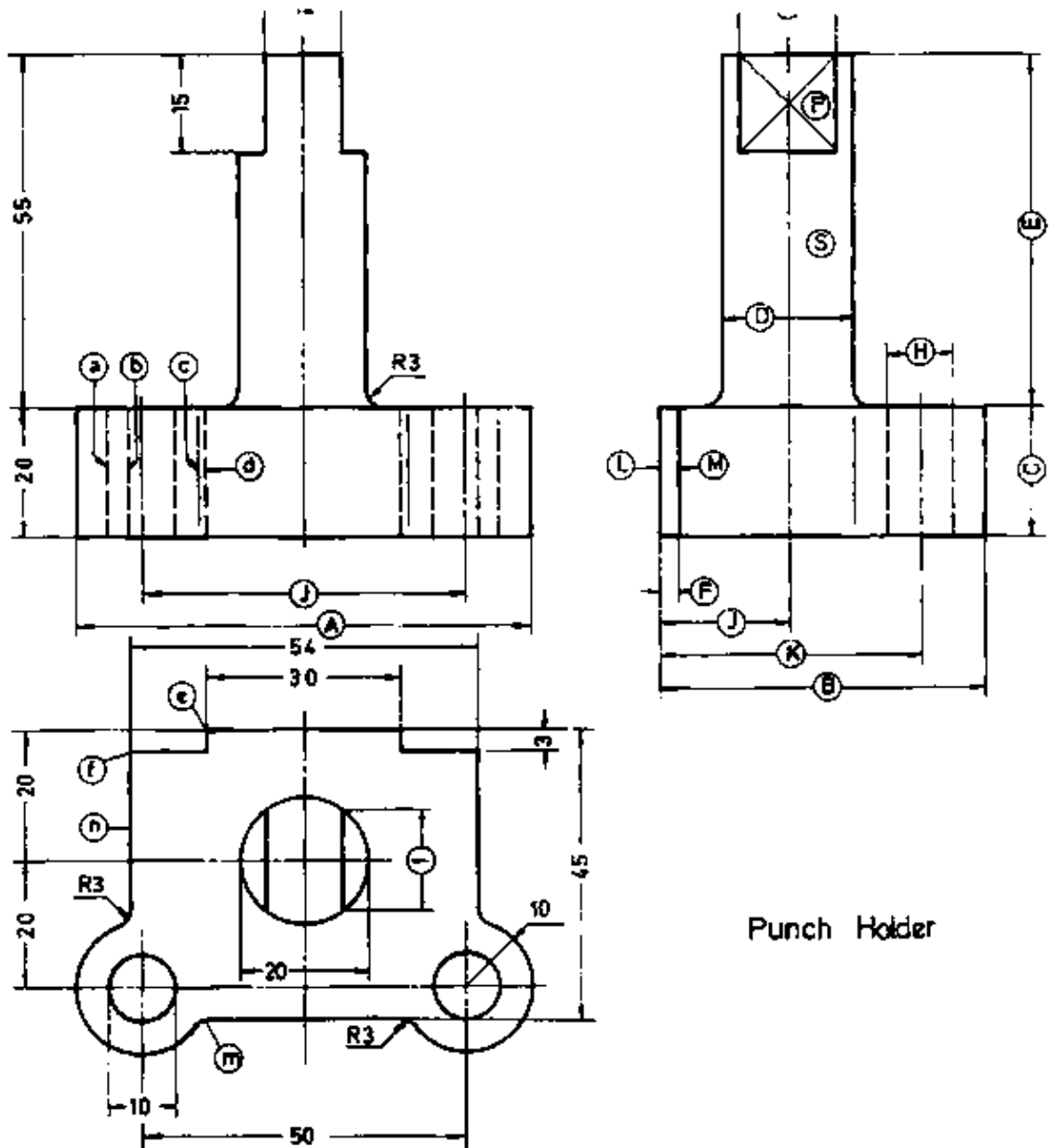
1. Dimension "A" (side view) is.....mm.
2. Dimension "B" (side view) is.....mm.
3. Dimension "C" (side view) is.....mm.
4. Dimension "D" (side view) is.....mm.
5. The surface quality of the job is marked by.....



Punch Holder

Fill in the blanks:

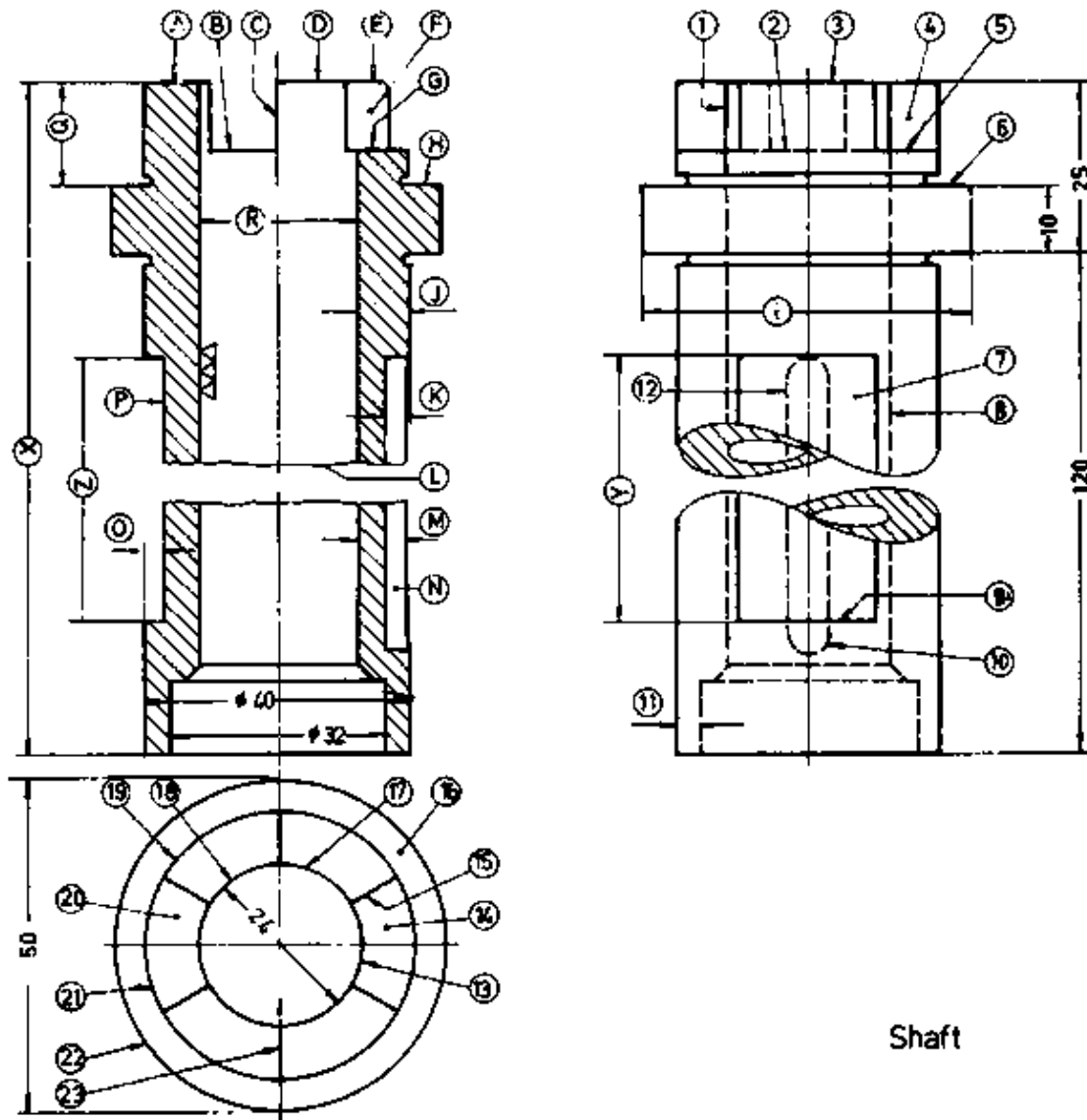
1. Dimension "A" (elevation view) is.....mm.
2. Edge "e" (plan view) is represented in the elevation view by line.....
3. Edge "M" (side view) is represented in the elevation view by line.....
4. Dimension "B" (side view) is.....mm.
5. Dimension "J" (side view) is.....mm.



Punch Holder

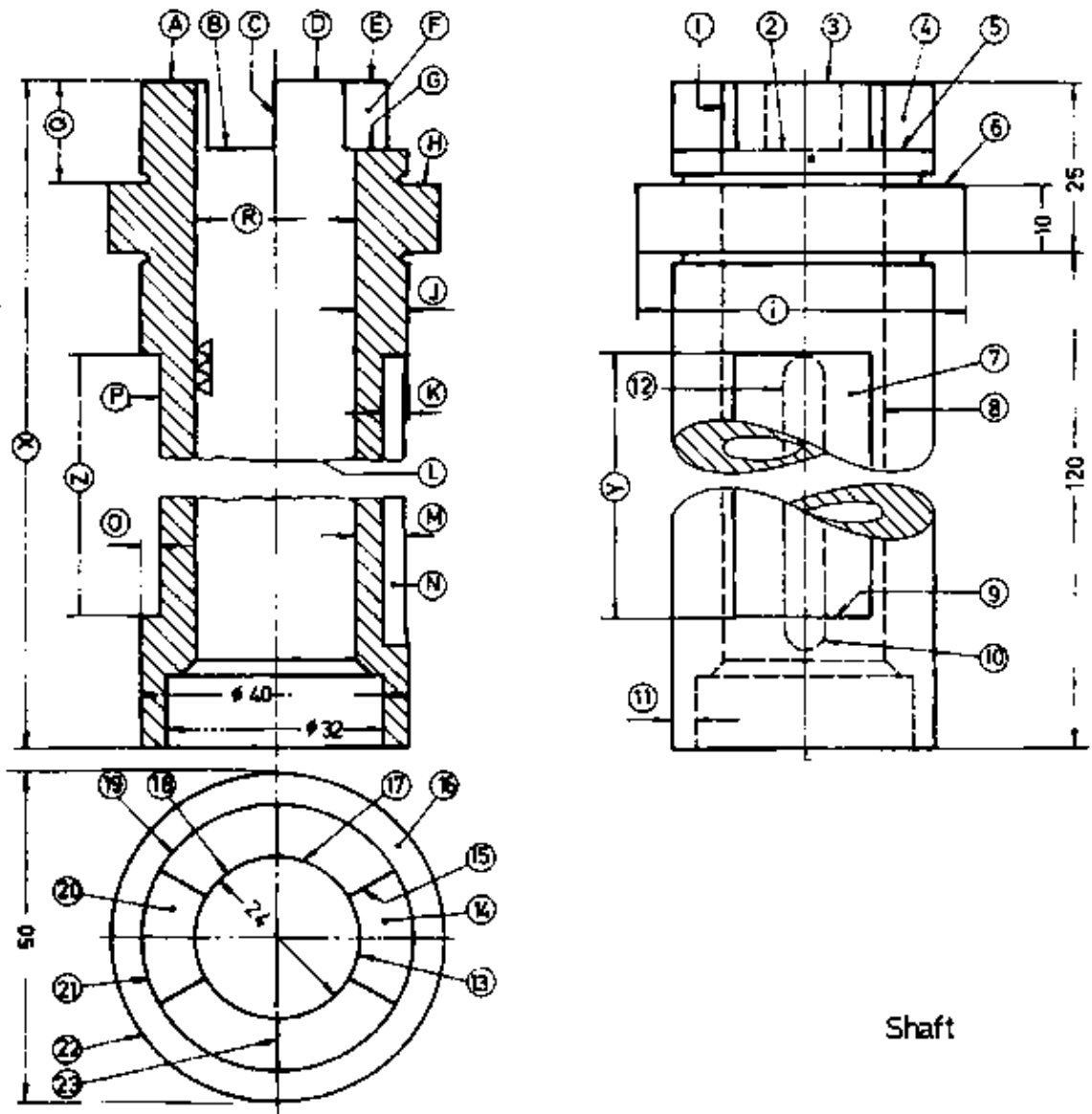
Fill in the blanks:

1. Dimension "F" (side view) is.....mm.
2. Diameter "H" (side view) of the cylindrical hole is.....mm.
3. Dimension "K" (side view) is.....mm.
4. Edge "M" (side view) is represented in the elevation view by line.....
5. Dimension "D" (side view) is..... mm.



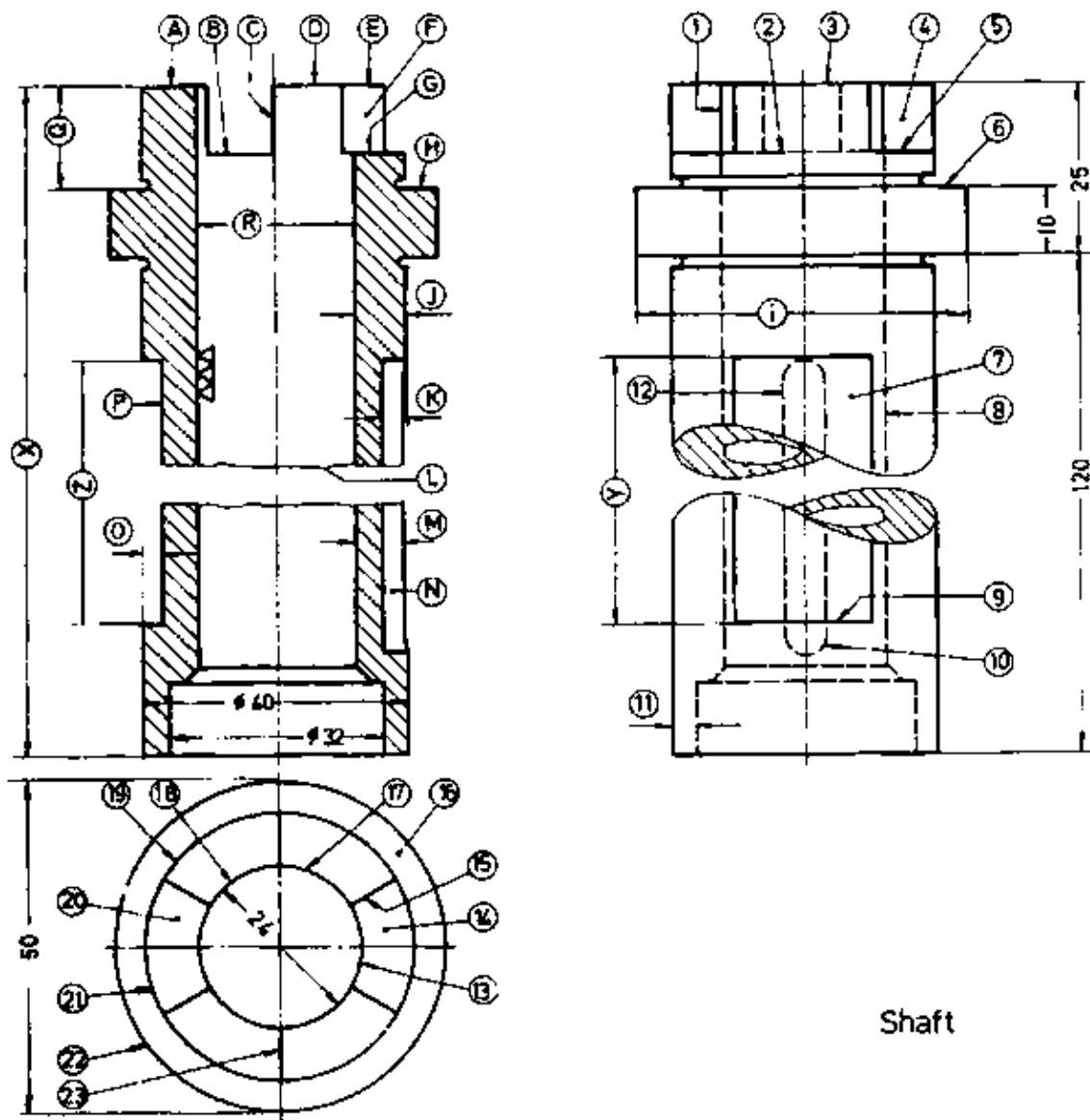
Fill in the blanks:

1. Dimension "Q" (elevation view) is..... mm.
2. Dimension "11" (side view) is.....mm.
3. Surface "7" (side view) is represented in the elevation view by line.....
4. Edge "22" (plan view) is represented in the side view by line.....
5. Diameter "R" (elevation view) is.....



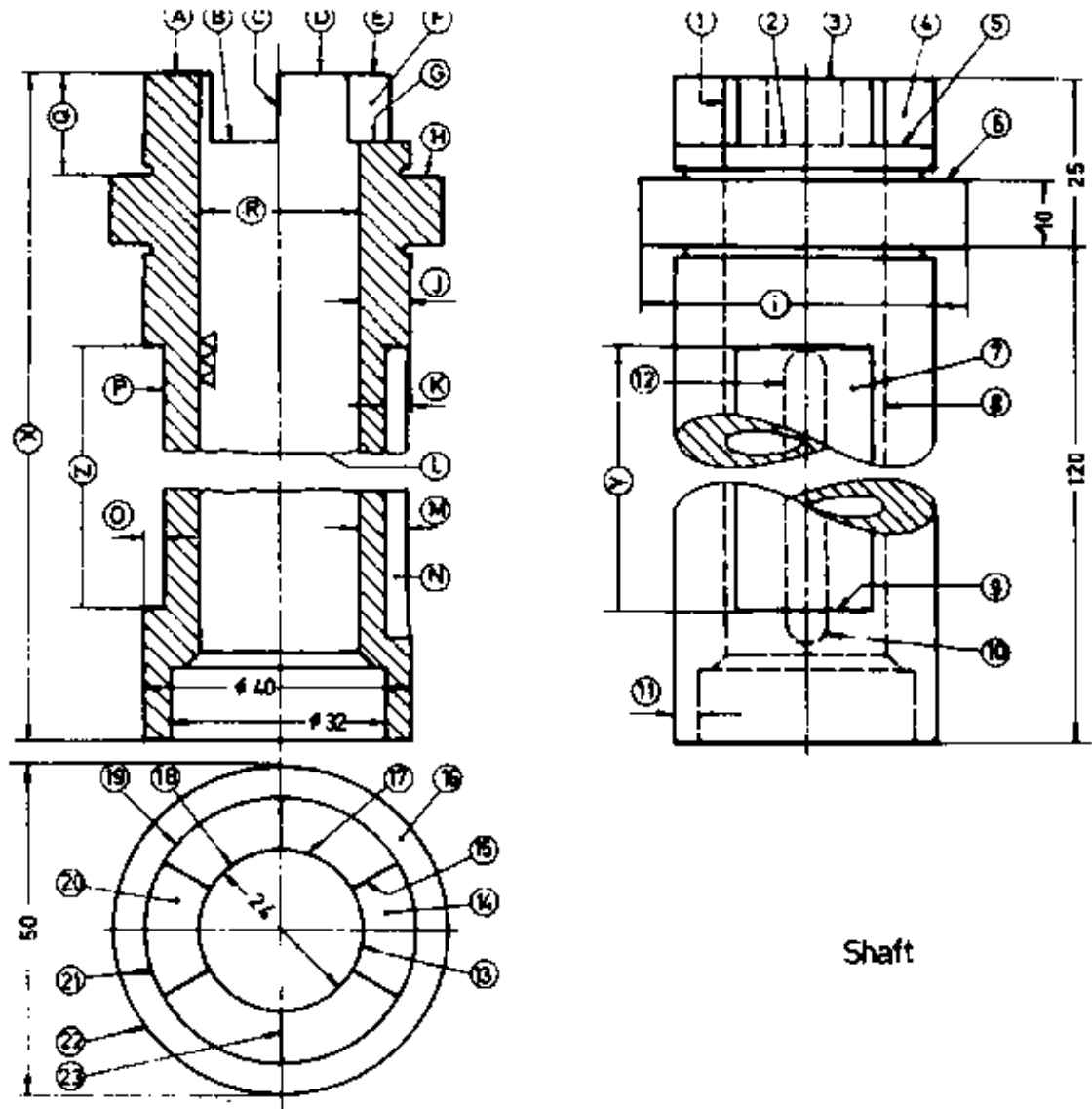
Fill in the blanks:

1. Diameter "i" (side view) is.....mm.
2. Surface "N" (elevation view) is represented in the side view by line.....
3. Surface "16" (plan view) is represented in the elevation view by line.....
4. Surface "4" (side view) is represented in the plan view by line.....
5. Edge "22" (plan view) is represented in the side view by line.....



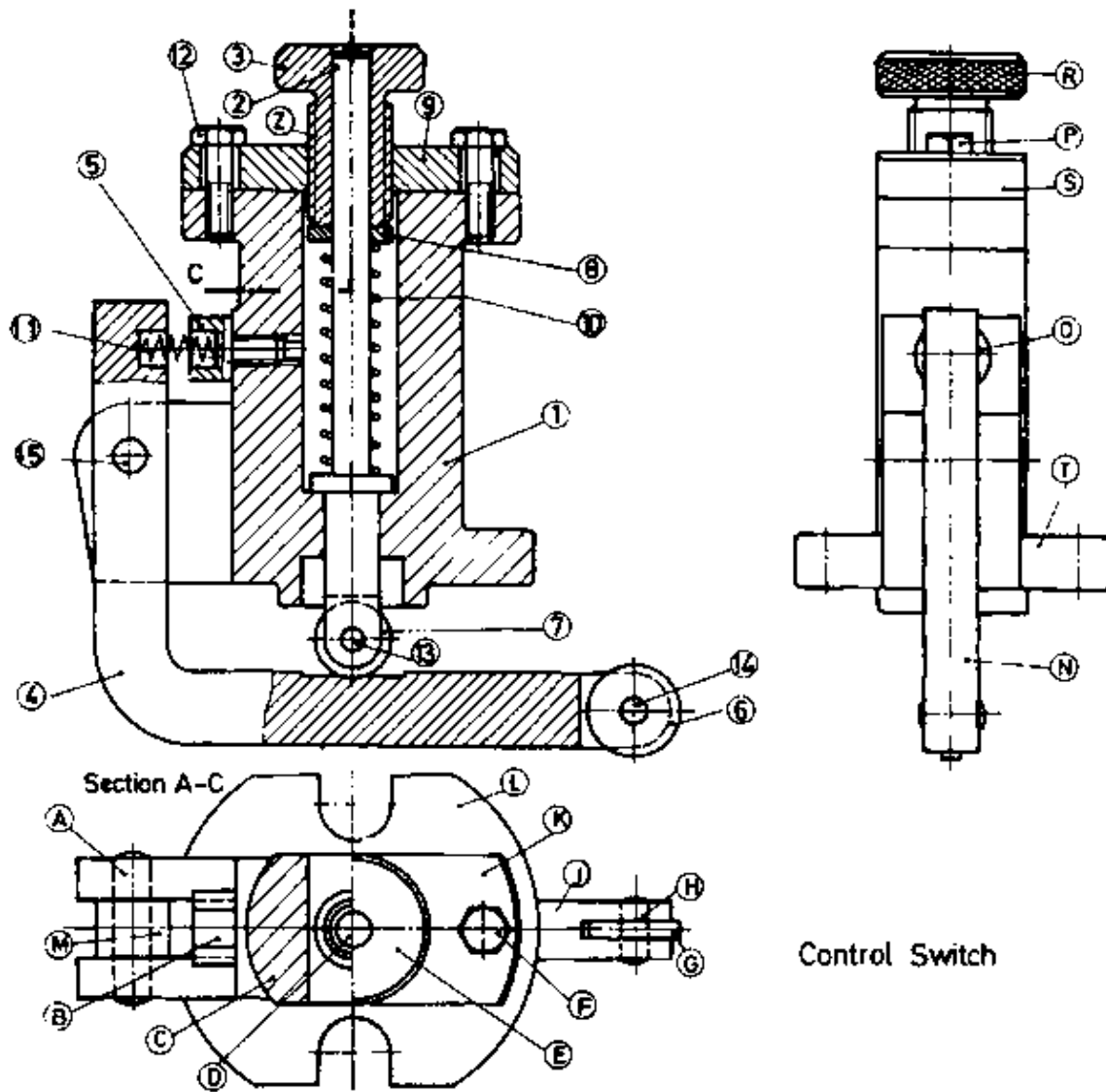
Fill in the blanks:

1. Surface "20" (plan view) is represented in the elevation view by line.....
2. Edge "18" (plan view) is represented in the elevation view by line.....
3. Edge "17" (plan view) is represented in the elevation view by line.....
4. Surface "F" (elevation) is represented in the plan view by line
5. The overall length "X" (elevation view) is.....mm.



Fill in the blanks:

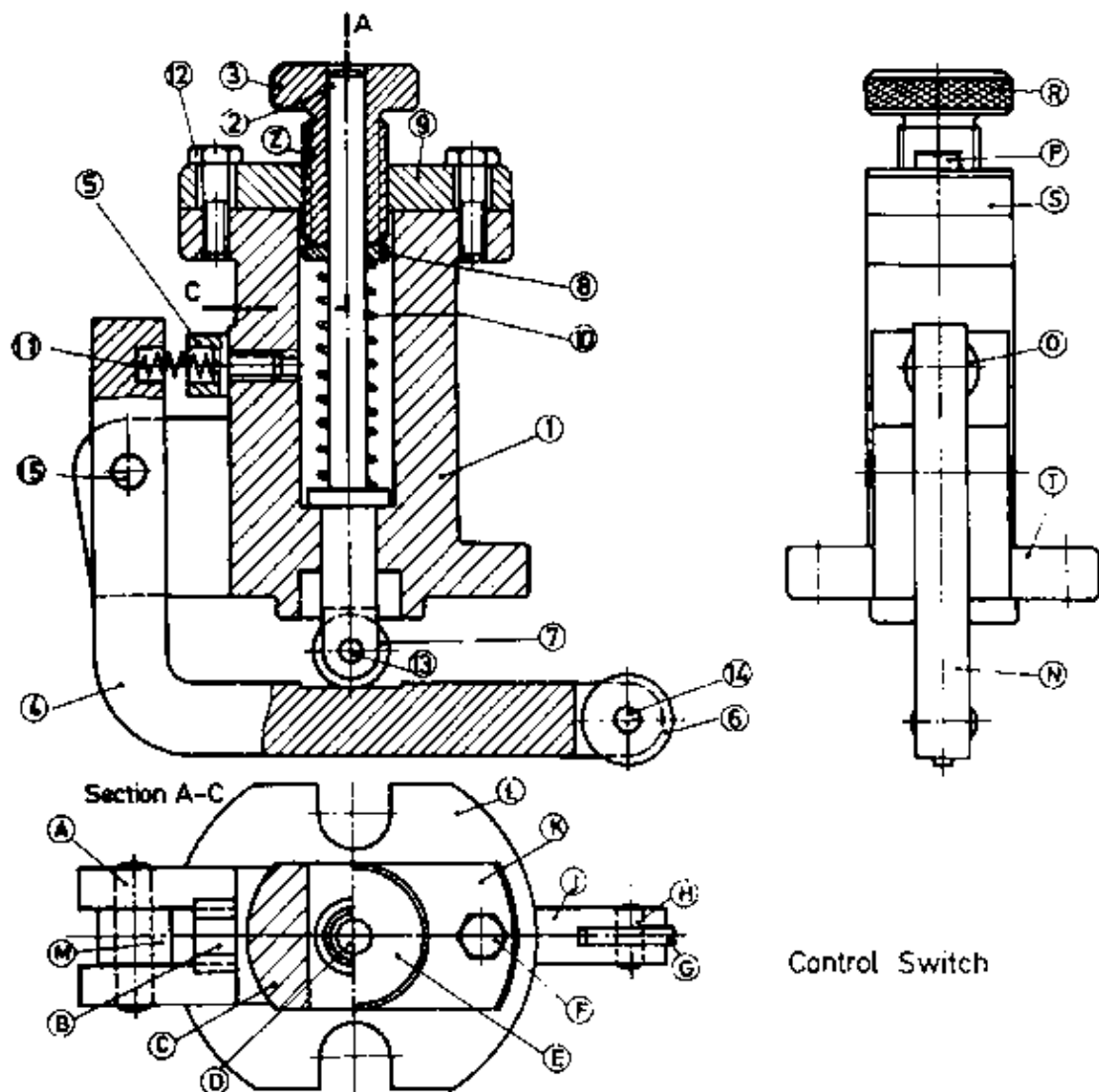
1. Dimension "Y" (side view) is represented in the elevation view by.....
2. In the side view a shorter length than the actual length is shown. This dimension is.....mm.
3. Surface "14" (plan view) is represented in the elevation view by line.....
4. Edge "C" (elevation view) is represented in the side view by line.....
5. Symbol "???" indicates.....



Control Switch

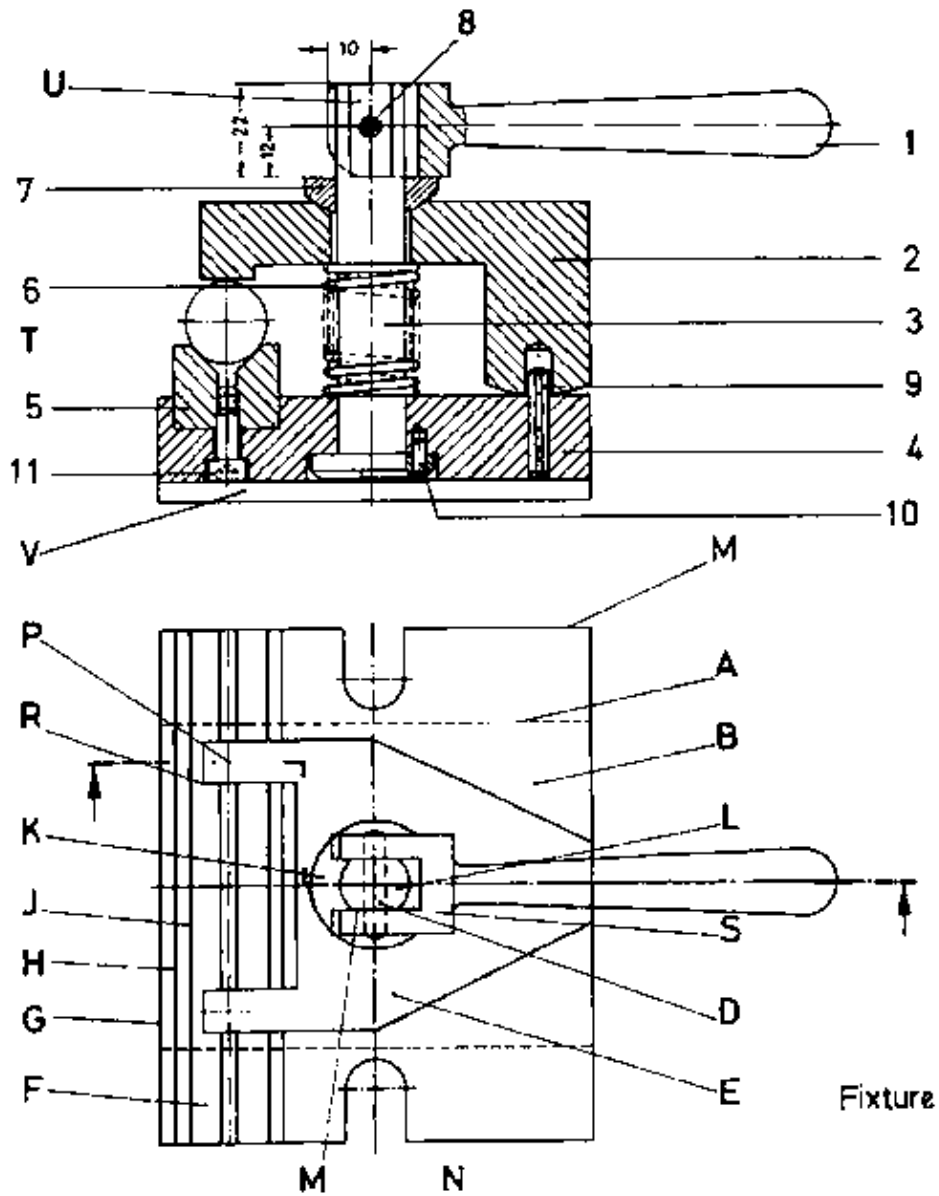
Fill in the blanks:

1. Part "M" (plan view) is represented in the side view by letter.....
2. Part "S" (side view) is represented in the elevation view by number.....
3. Line "Z" (elevation view) indicates.....
4. Part "E" (plan view) is represented in the side view by letter.....
5. Part "C" (plan view) is represented in the elevation view by number.....



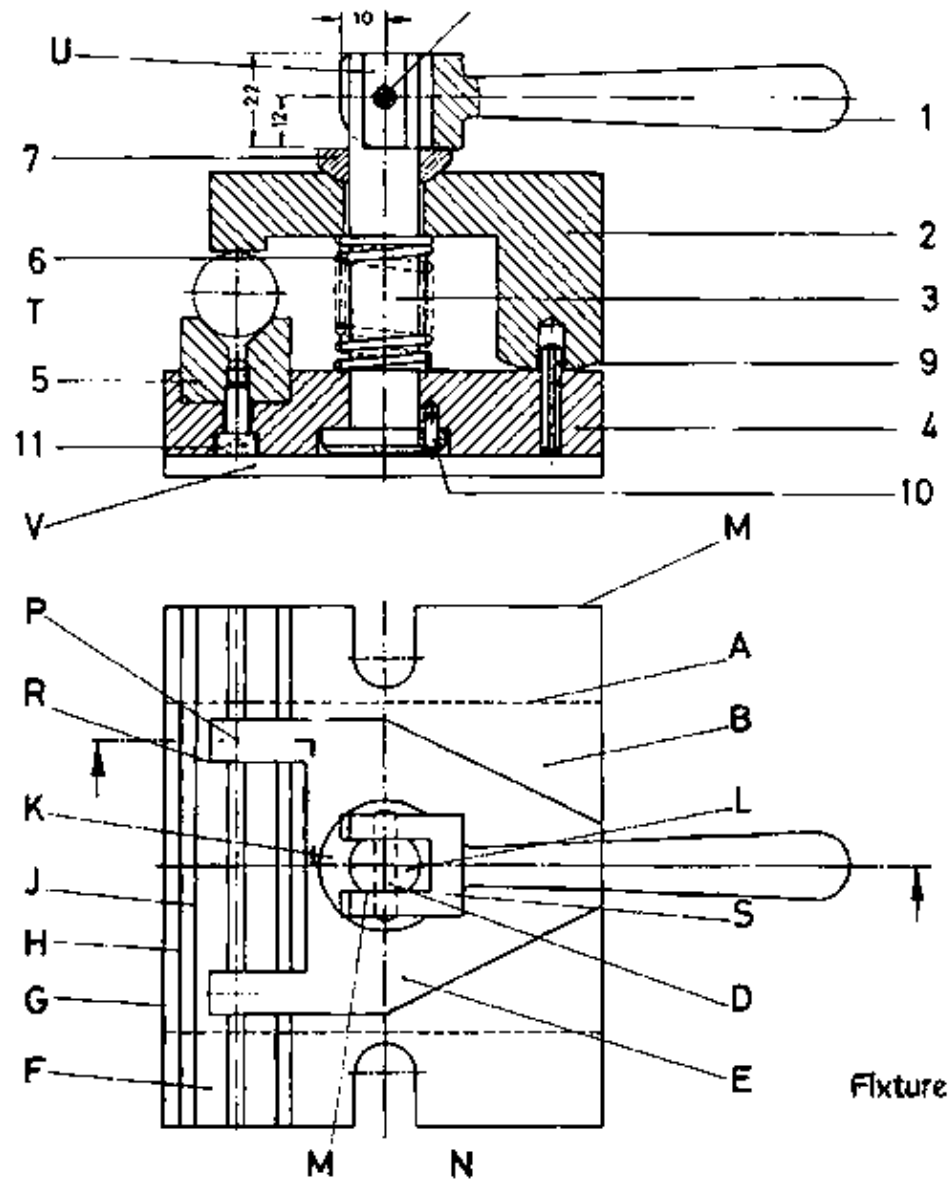
Fill in the blanks:

1. Part "10" (elevation view) is a.....
2. Part "1" (elevation view) is represented in the side view by letter.....
3. Part "B" (plan view) is represented in the elevation view by number.....
4. Part "K" (plan view) is represented in the side view by letter.....
5. Part "O" (side view) is represented in the elevation view by number.....



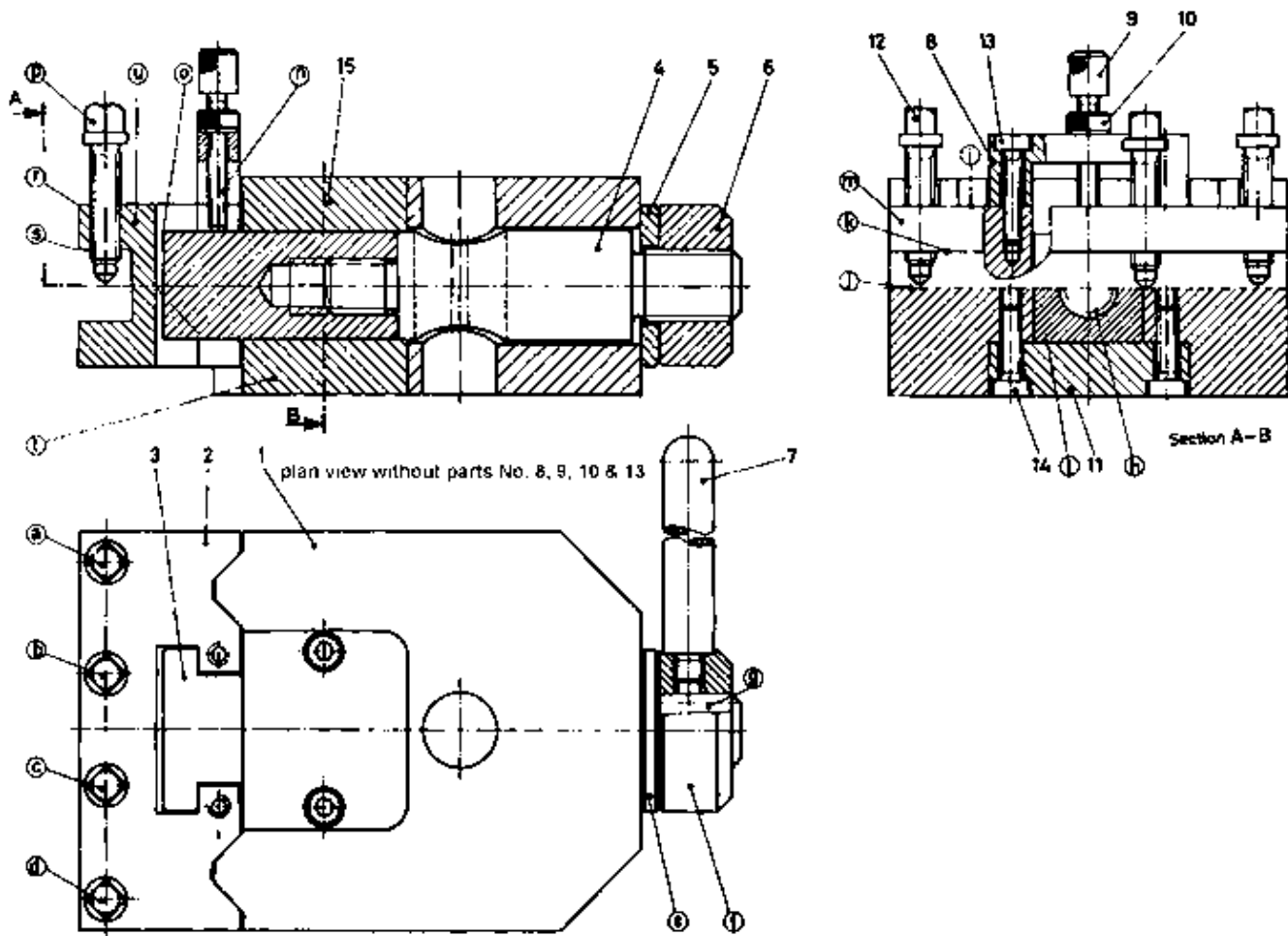
Fill in the blanks:

1. Edge "T" (elevation view) is represented in the plan view by.....
2. Part "S" (plan view) is represented in the elevation view by.....
3. Part "F" (plan view) is represented in the elevation view by.....
4. Surface "U" (elevation view) is represented in the plan view by.....
5. The position of screw 11 (elevation view) is indicated in the plan view by.....



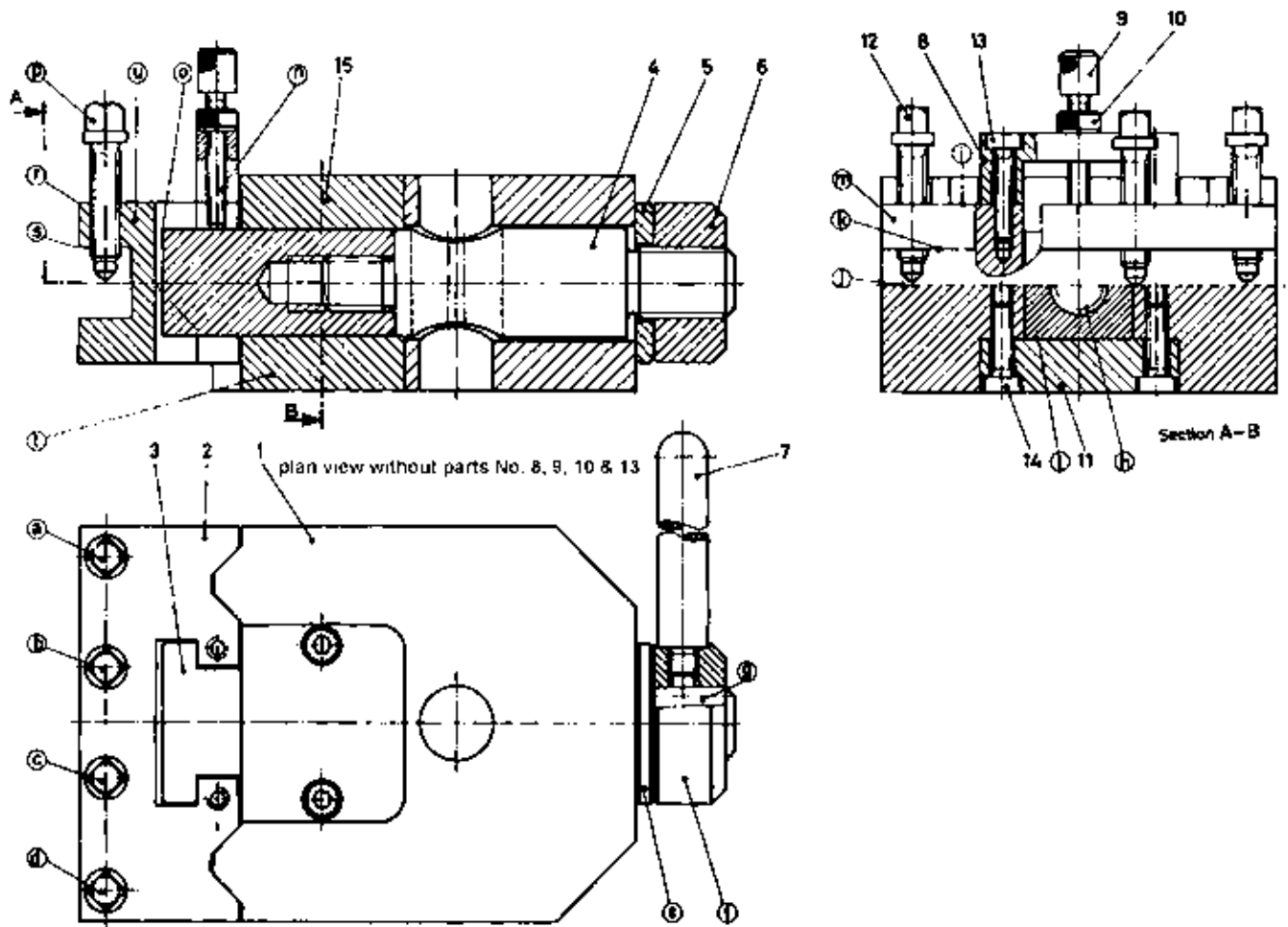
Fill in the blanks:

1. Edge "V" (elevation view) is represented in the plan view by line.....
2. Part "B" (plan view) is represented in the elevation view by.....
3. Part 3 (elevation view) is represented in the plan view by.....
4. Part "K" (plan view) is represented in the elevation view by.....
5. Part 2 (elevation view) is represented in the plan view by.....



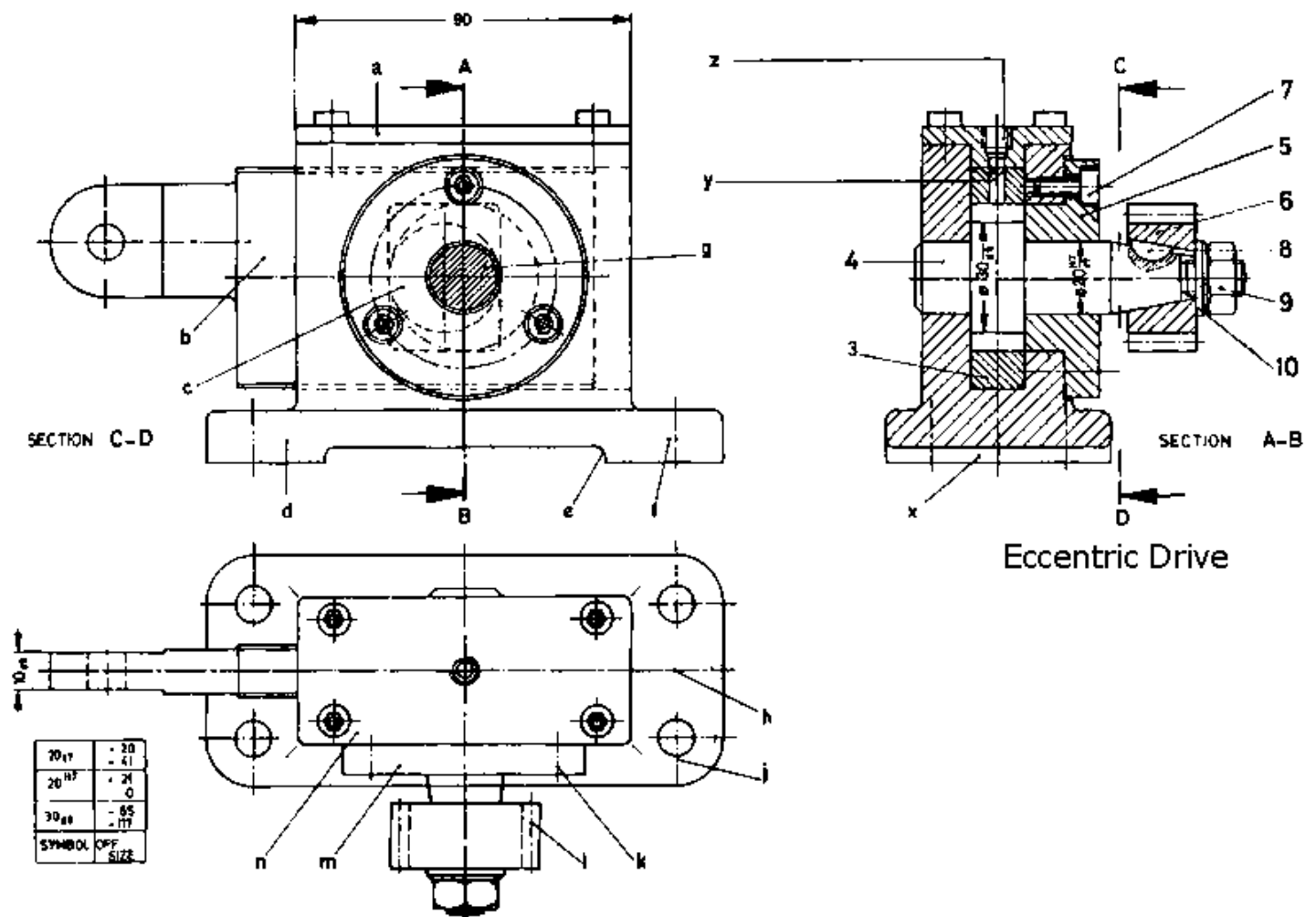
Fill in the blanks:

1. The required quantity of screw "12" is.....
2. Part 6 (elevation view) is represen(...) ted in the plan view by.....
3. Part 2 (plan view) is represented in the elevation view by.....
4. Part "n" (elevation view) is represented in the side view by.....
5. Part 4. (elevation view) is represented in the plan view by.....



Fill in the blanks:

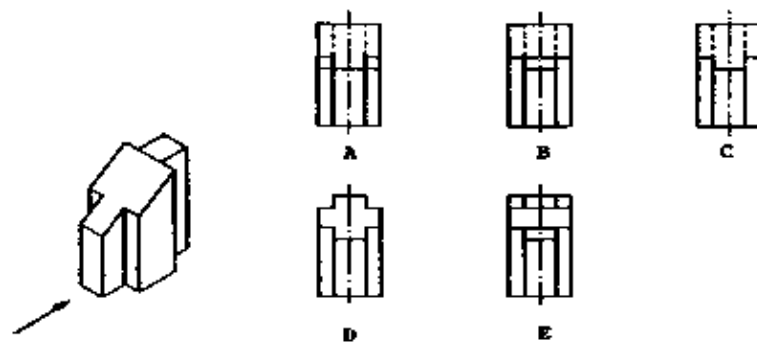
1. Line "h" (side view) indicates
2. Part "t" (elevation view) is represented in the side view by.....
3. Part "m" (elevation view) is represented in the plan view by.....
4. A shortened representation has been used in the drawing for part.....
5. Edge "S" (elevation view) is represented in the side view by.....



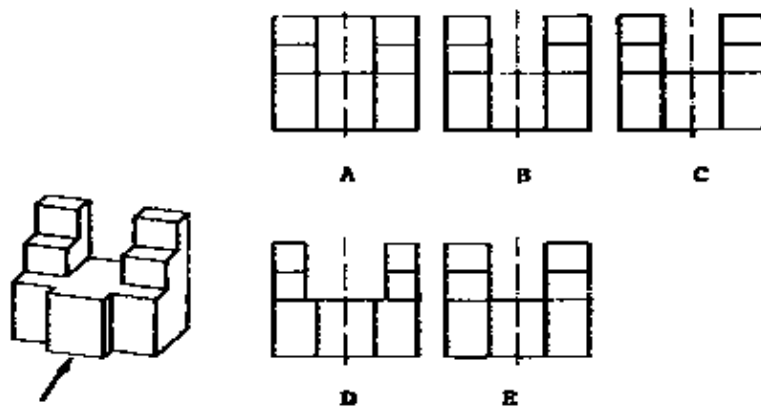
Fill in the blanks:

1. The eccentric disc & empty; 30 is represente in the elevation view by.....
2. The surface "X" (side view) is represented in the elevation view by line.....
3. The position of screw 7 (side view) is marked in the plan view by.....
4. The tolerance for the shaft & empty; 20 is indicated by.....
5. The side view is represented as section. The position of the section plane is indicated by line.....

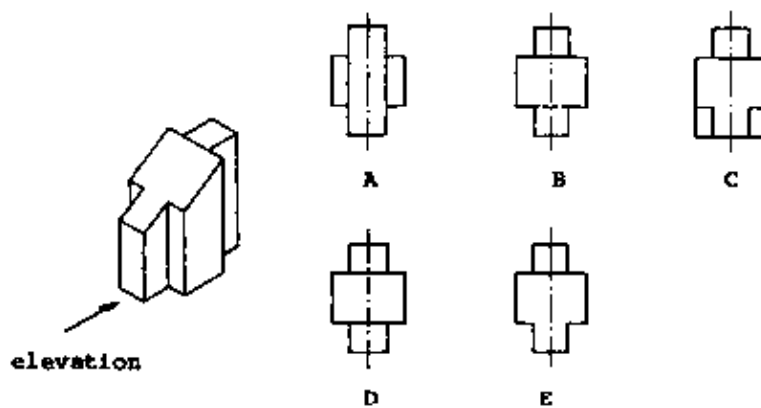
V 1.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



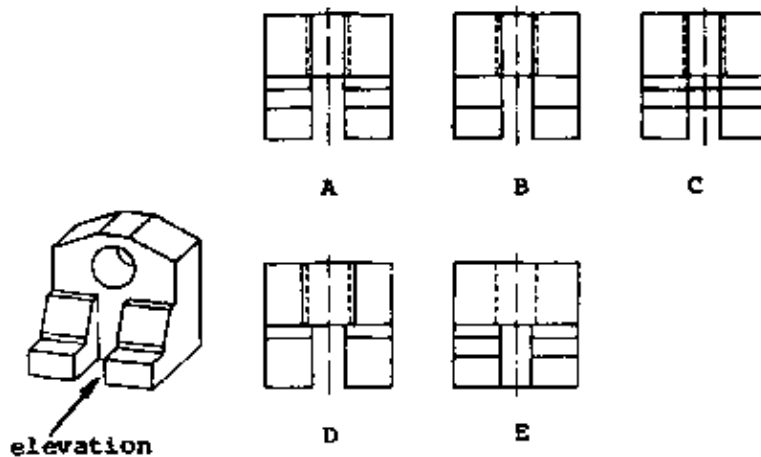
V 1.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



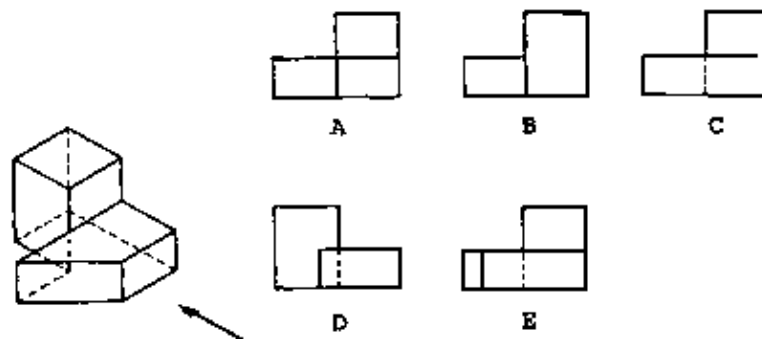
V 2.1: Which picture shows the plan view correctly?



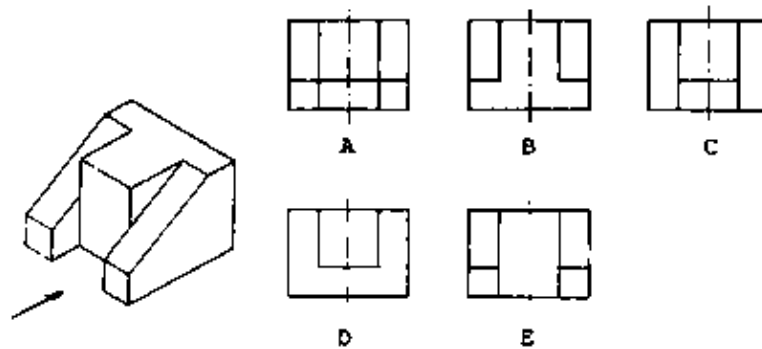
V 2.2: Which picture shows the plan view correctly?



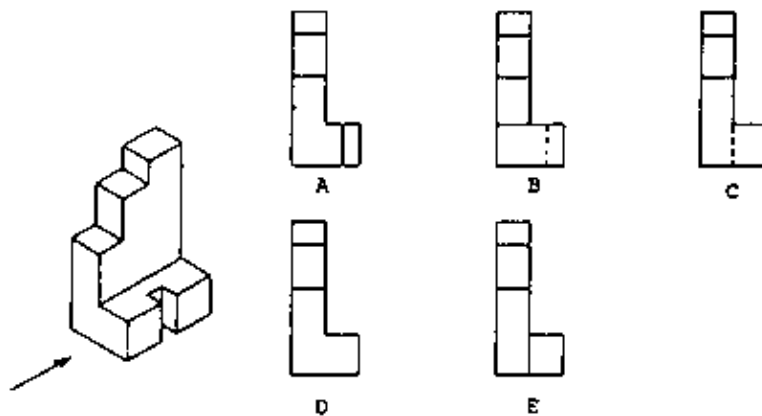
V 2.3: If you look in the direction of the dart, which picture shows the correct view of the work-piece?



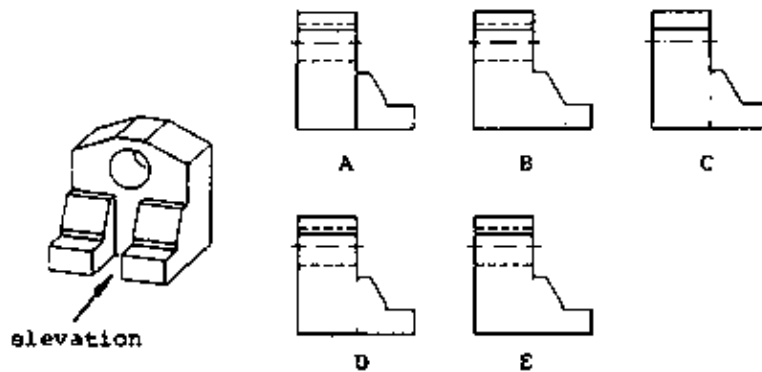
V 3.1: If you look in the direction of the dart, which picture shows the correct view of the workplace?



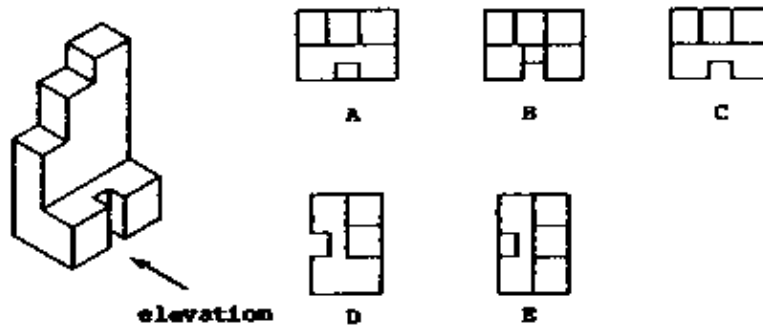
V 3.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



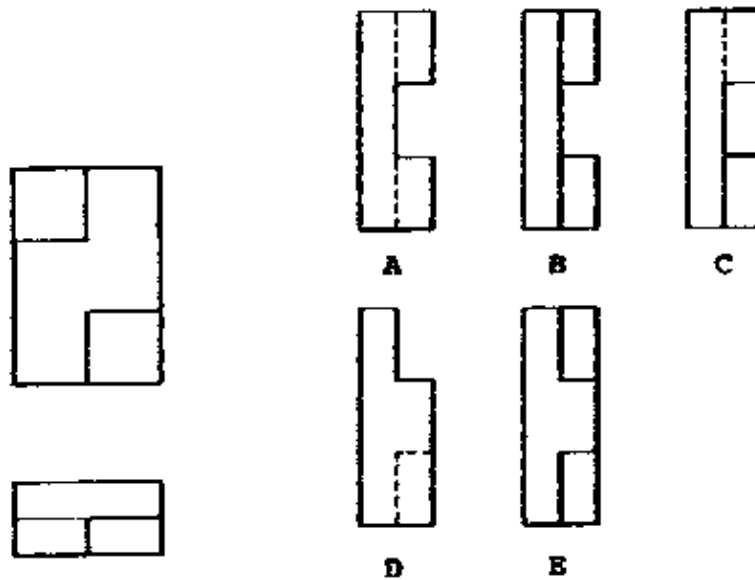
V 3.3: Which picture shows the side view correctly?



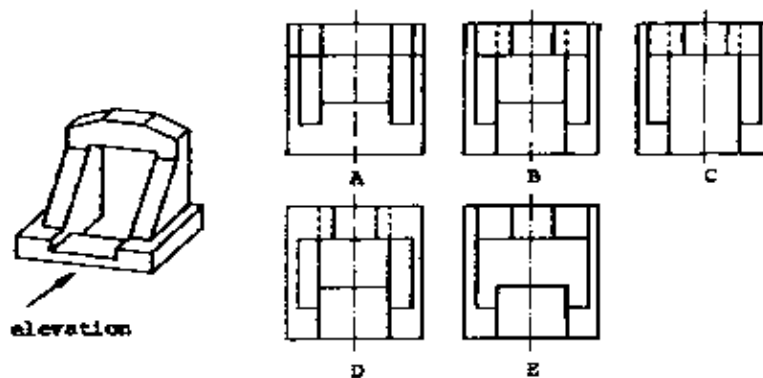
V 4.1: Which picture shows the plan view correctly?



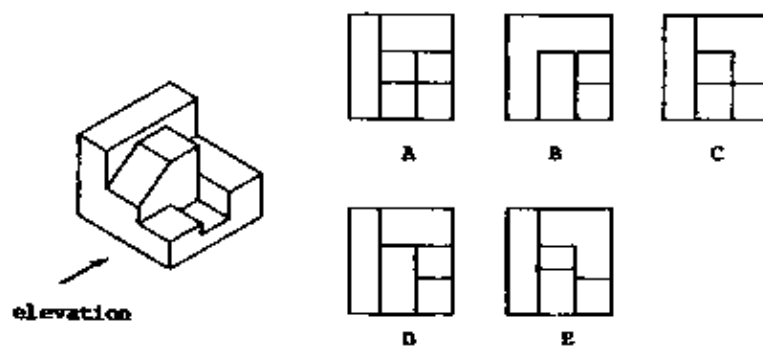
V 4.2: Given: elevation and plan view. Which picture shows the side view correctly?



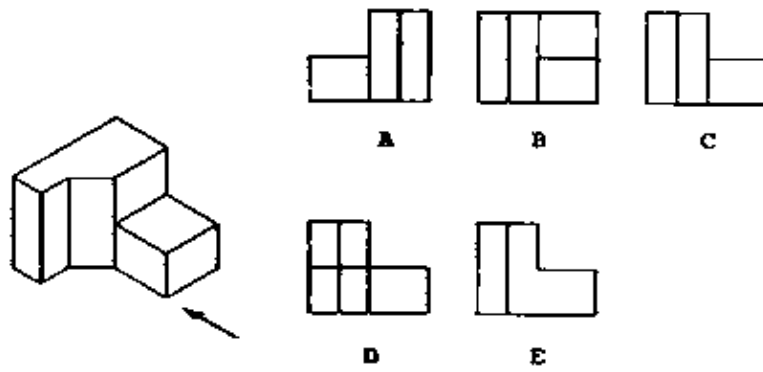
V 4.3: Which picture shows the plan view correctly?



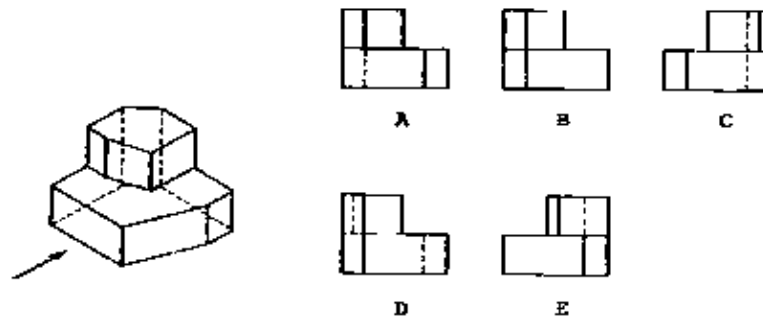
V 5.1: Which picture shows the plan view correctly?



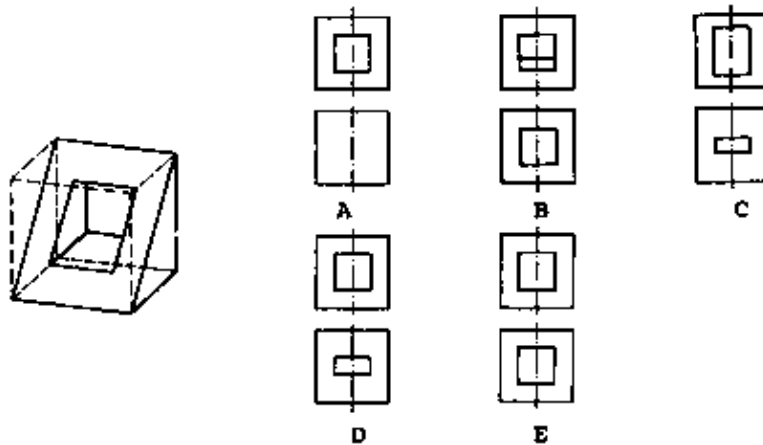
V 5.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



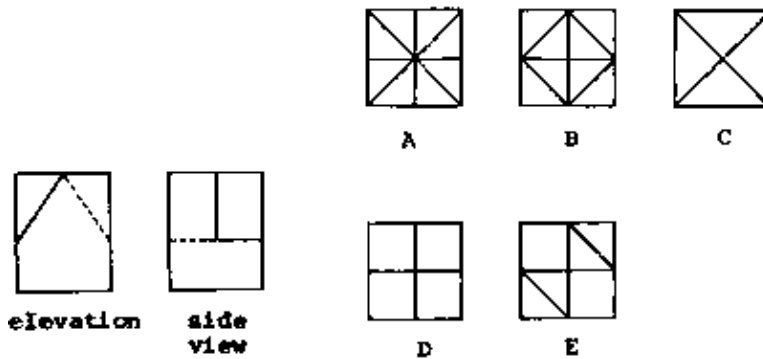
V 5.3: If you look in the direction of the arrow, which picture shows the correct view of the workpiece?



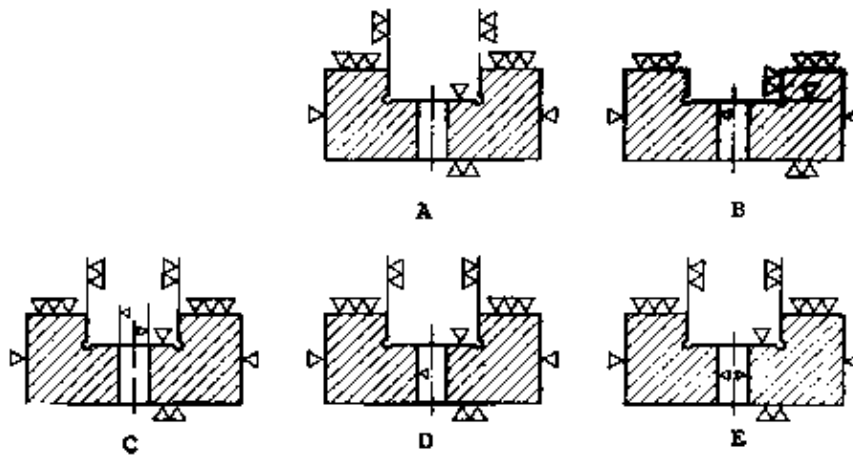
V 6.1: Which set of views gives a correct representation of the prismatic work-piece?



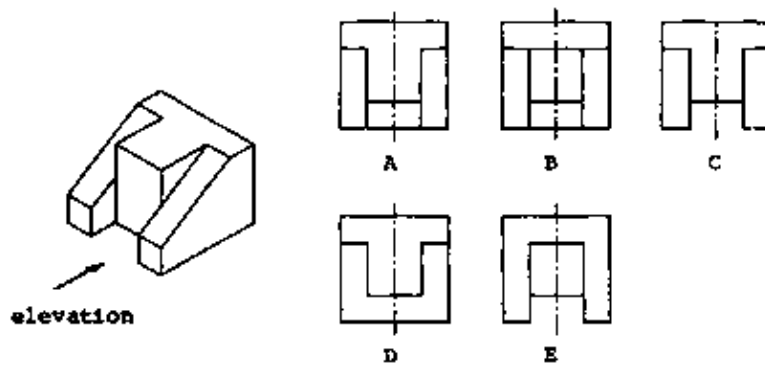
V 6.2: Given: elevation and plan view. Which picture shows the plan view correctly?



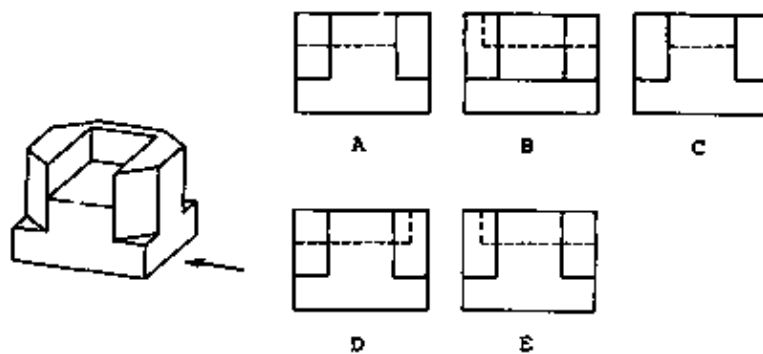
V 6.3: In which of the representations are the surface symbols entered correctly?



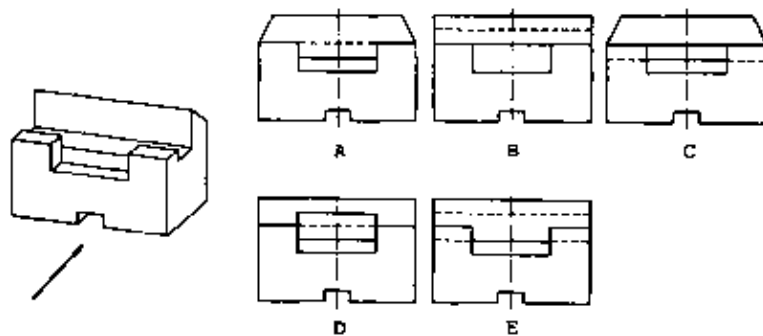
V 7.1: Which picture shows the plan view correctly?



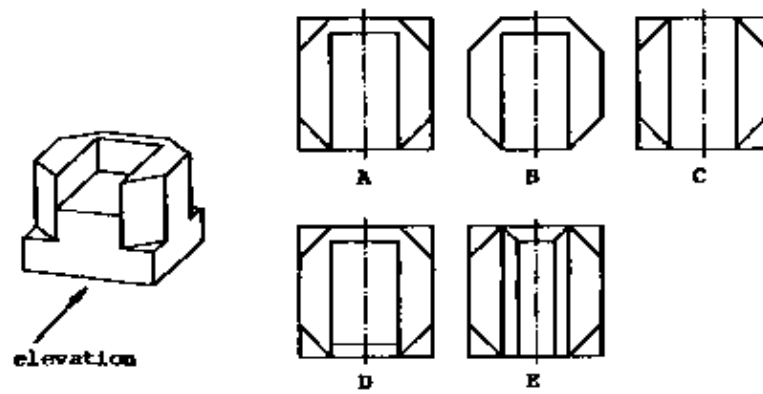
V 7.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



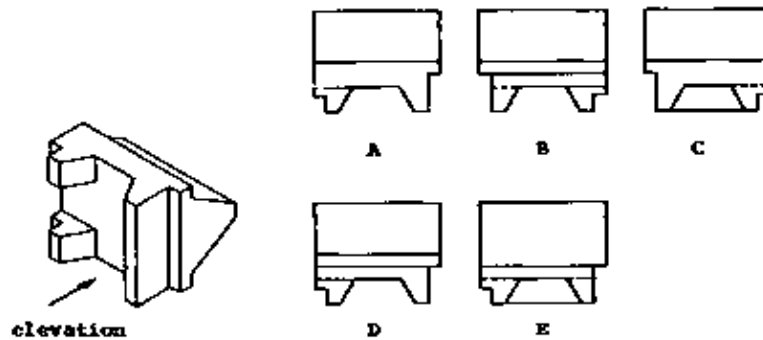
V 7.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



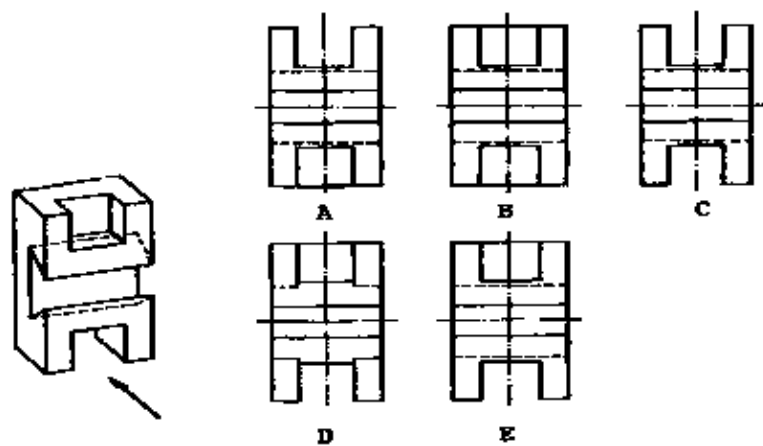
V 8.1: Which picture shows the plan view correctly?



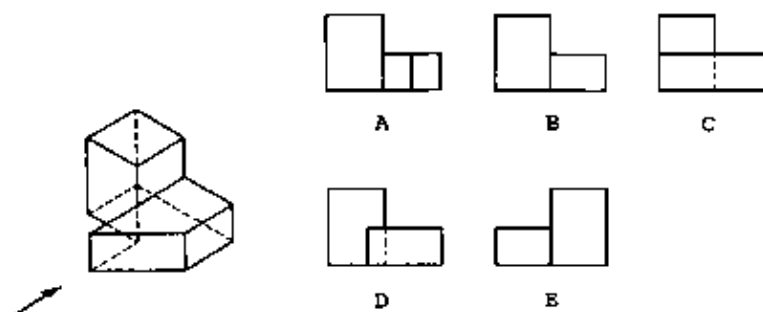
V 8.2: Which picture shows the plan view correctly?



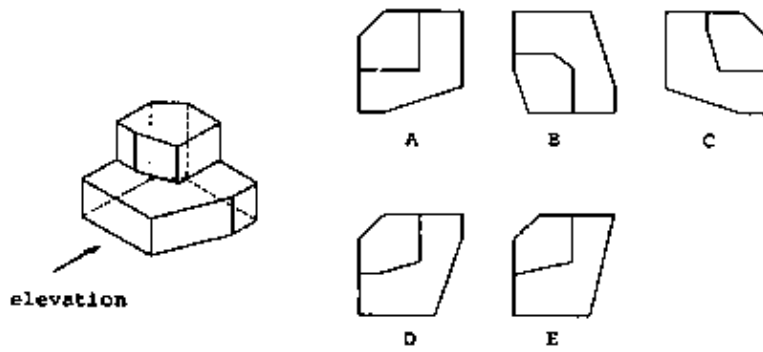
V 8.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



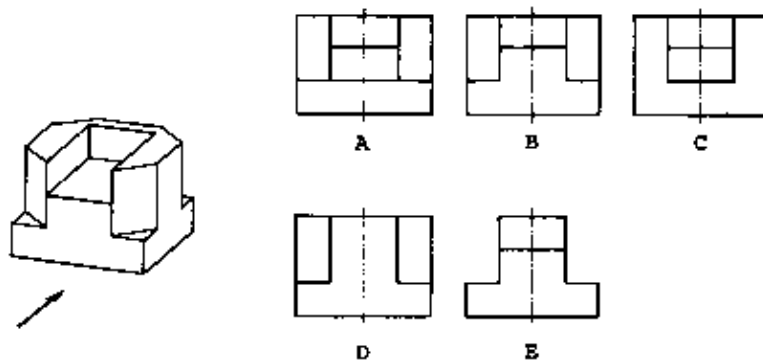
V 9.1: If you look in the direction of the dart, which picture shows the correct view of the work-piece?



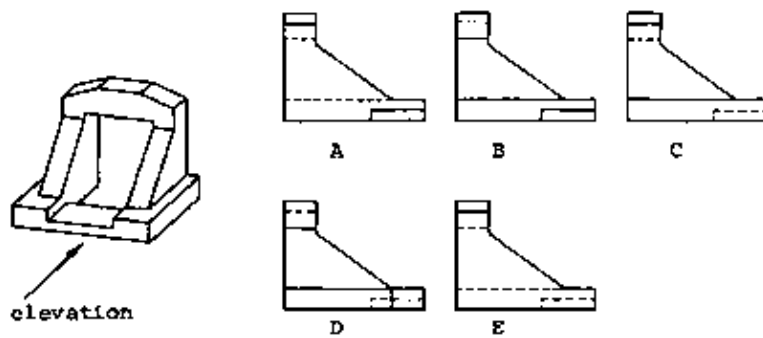
V 9.2: Which picture shows the plan view correctly?



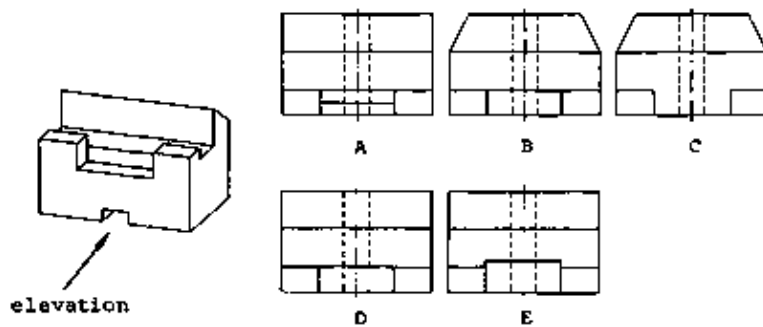
V 9.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



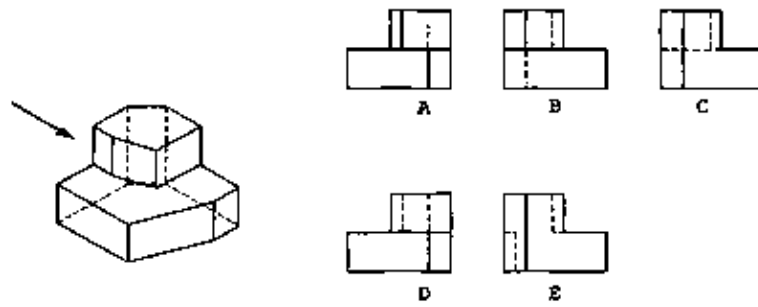
V 10.1: Which picture shows the side view correctly?



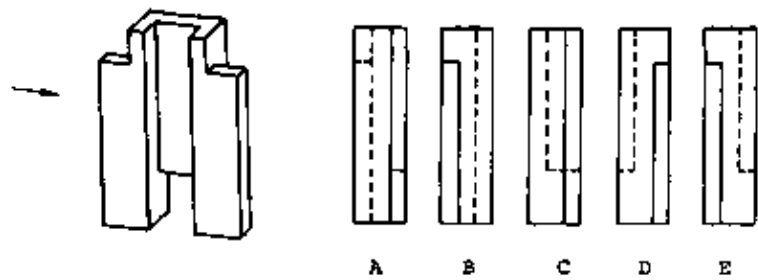
V 10.2: Which picture shows the plan view correctly?



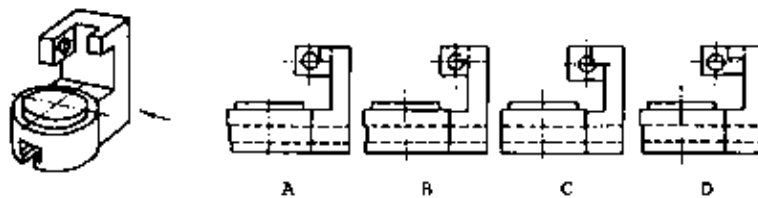
V 10.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



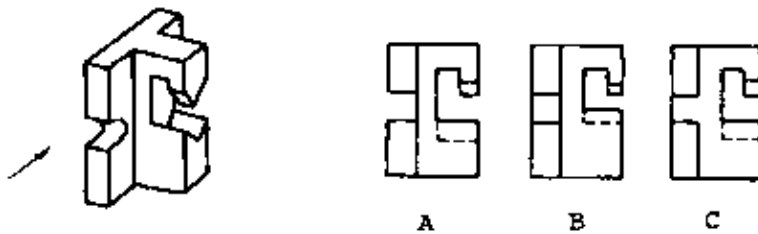
V 11.1: If you look in the direction of the dart which picture shows the correct view of the workpiece?



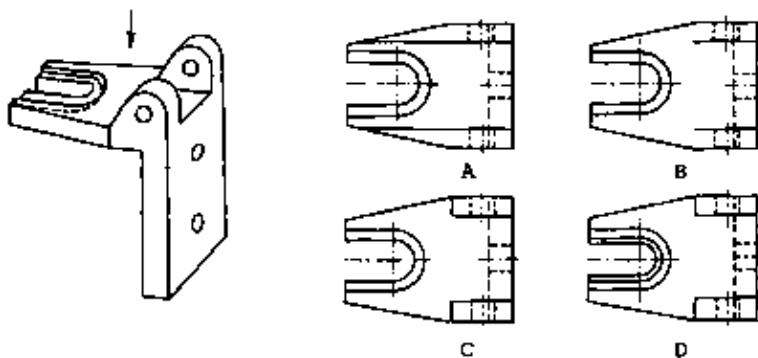
V 11.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



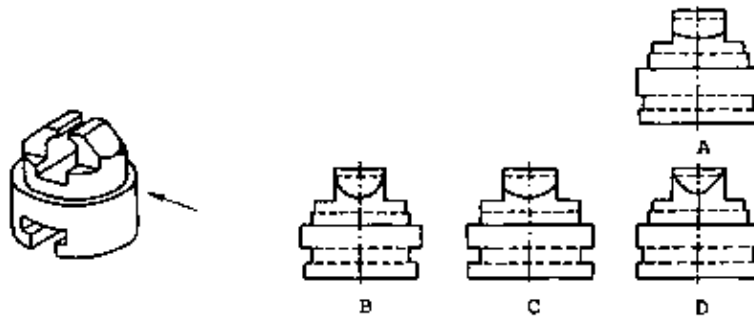
V 11.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



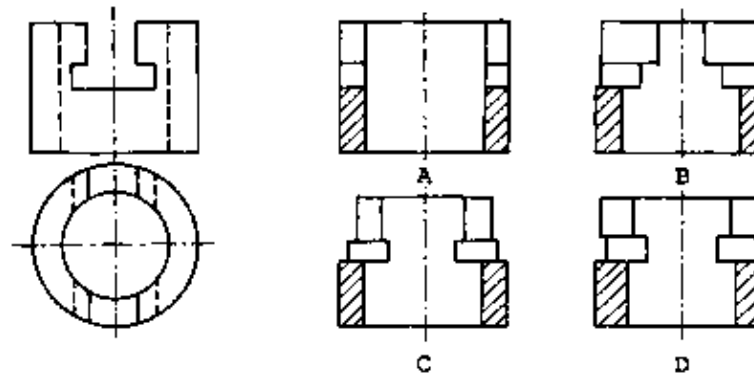
V 12.1: If you look in the direction of the dart which picture shows the correct view of the workpiece?



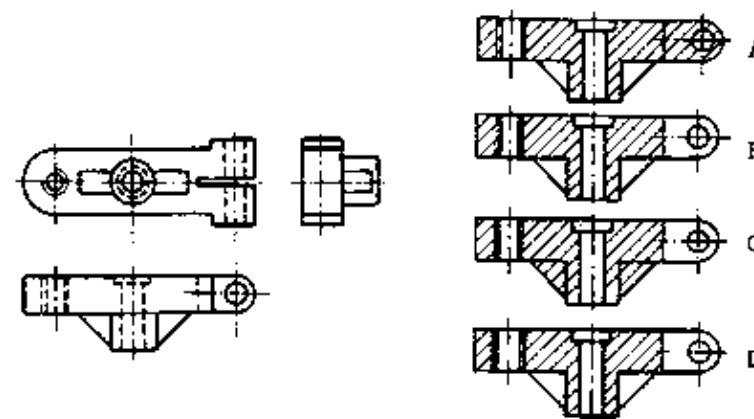
V 12.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



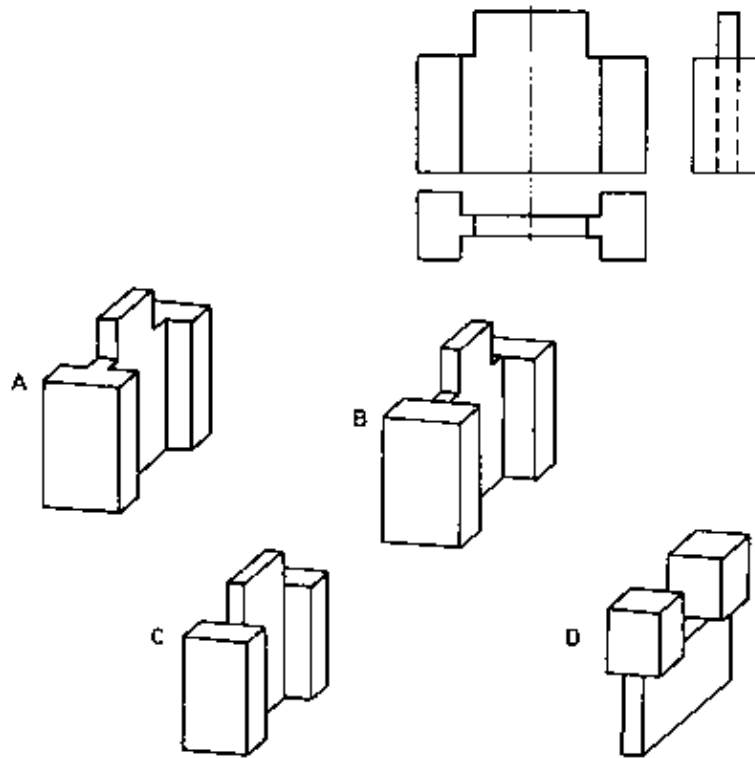
V 12.3: Given: elevation and plan view. Which of the sectional views is the correct side view?



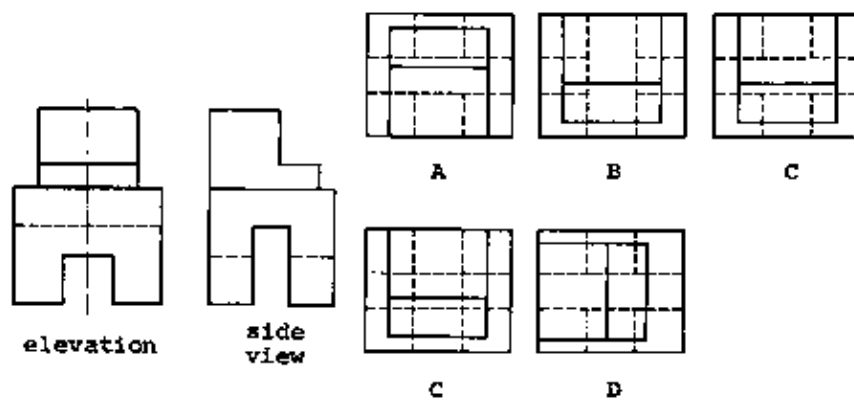
V 13.1: Given: elevation, side view and plan view. Which section shows the correct plan view?



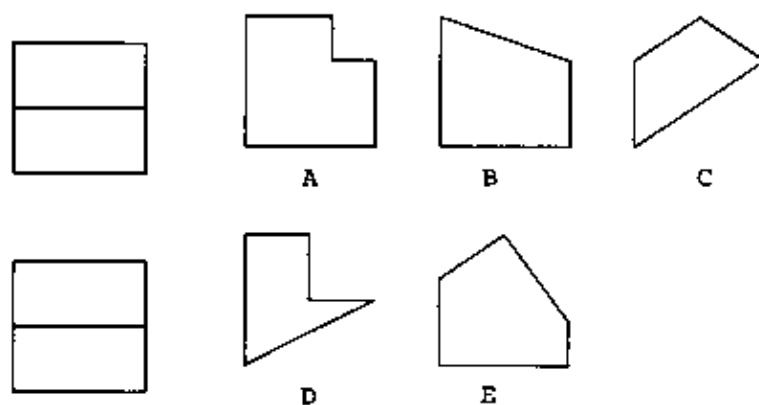
V 13.2: Which of the four is a correct representation of this workpiece?



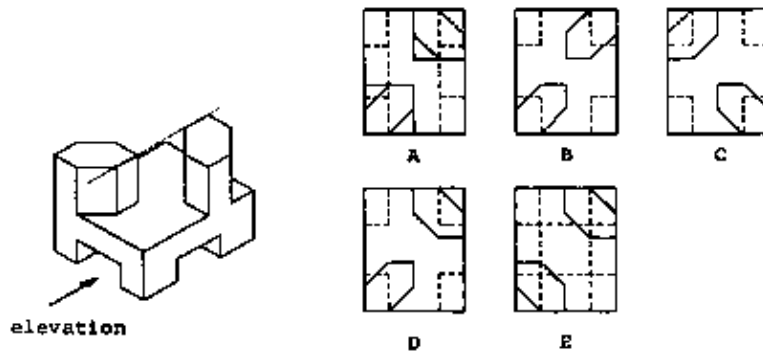
V 14.1: Given: elevation and side view. Which picture shows the plan view correctly?



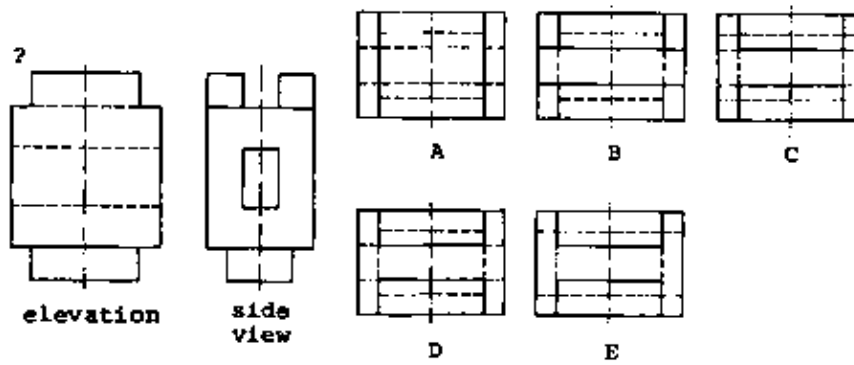
V 14.2: Given: elevation and plan view. Which picture shows the side view correctly?



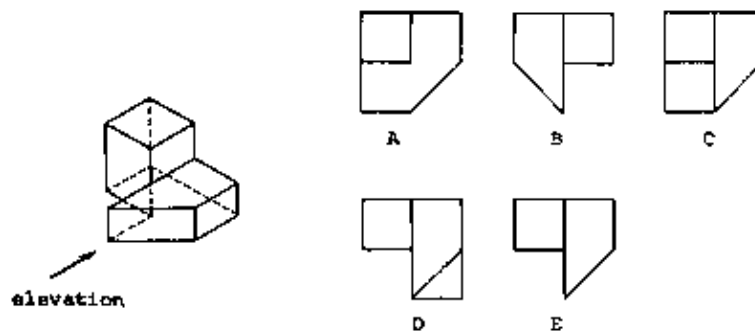
V 14.3: Which picture shows the plan view correctly?



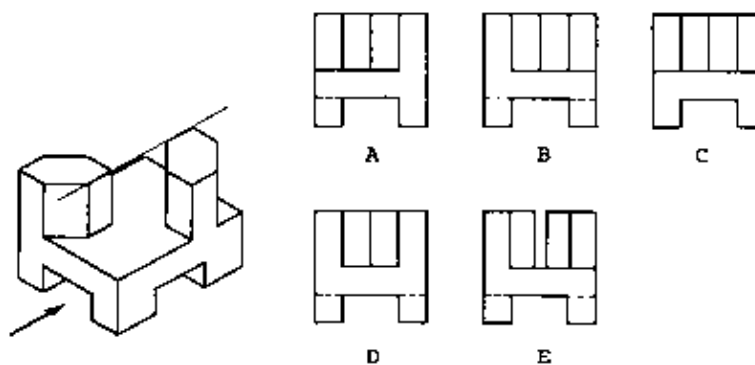
V 15.1: Which picture shows the plan view correctly?,



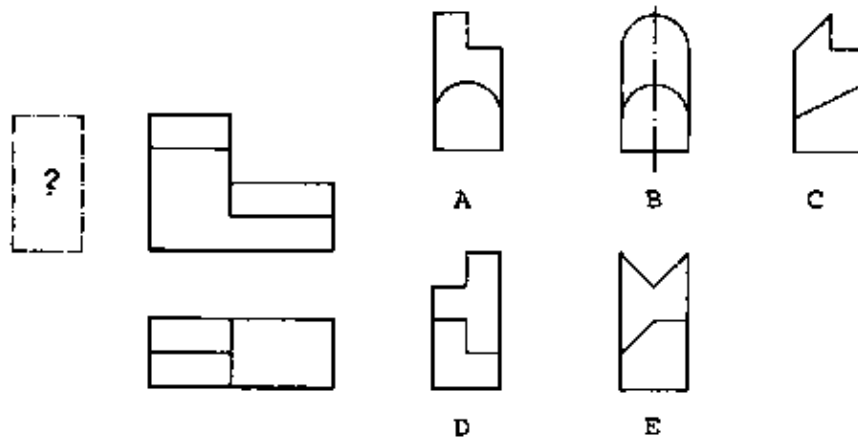
V 15.2: Which picture shows the plan view correctly?



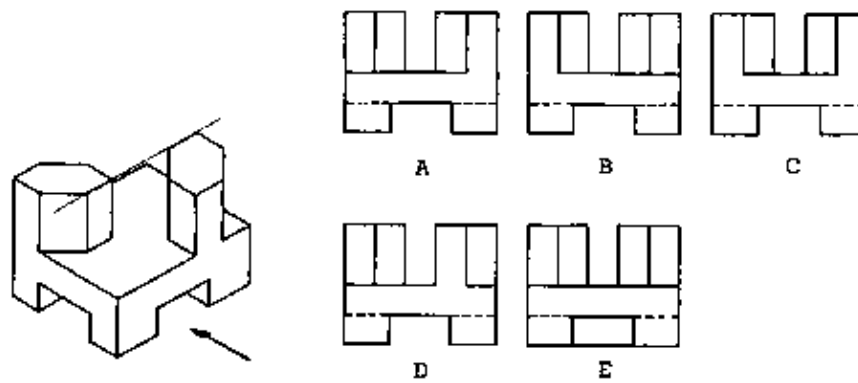
V 15.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



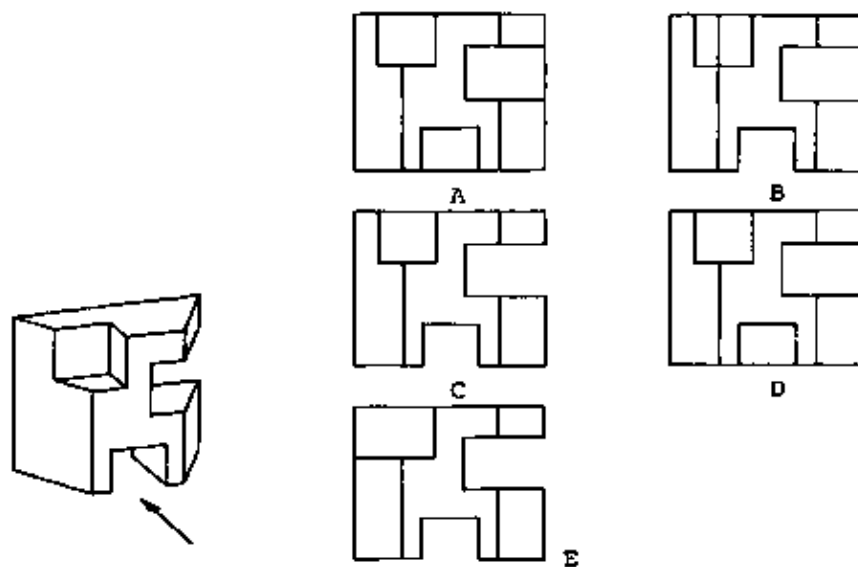
V 16.1: view from the right hand side correctly?



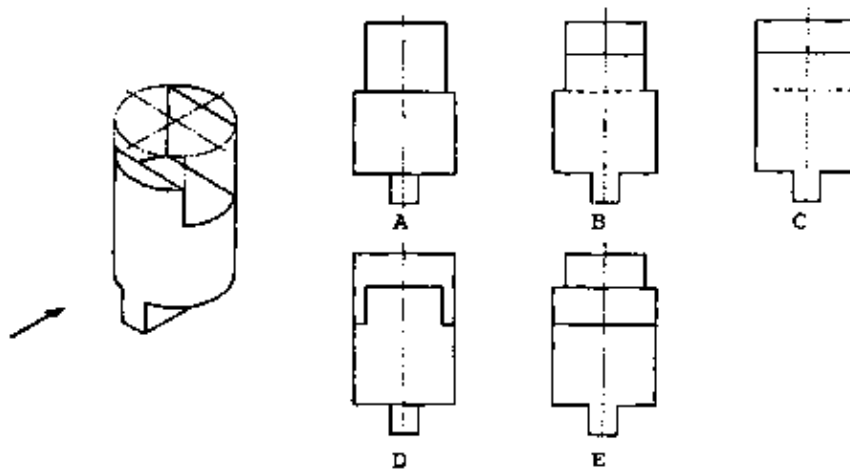
V 16.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



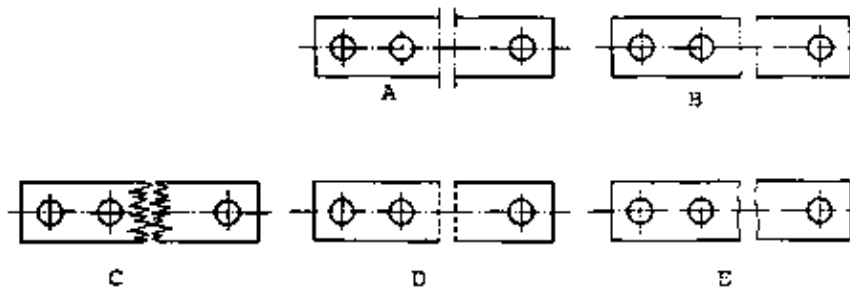
V 16.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



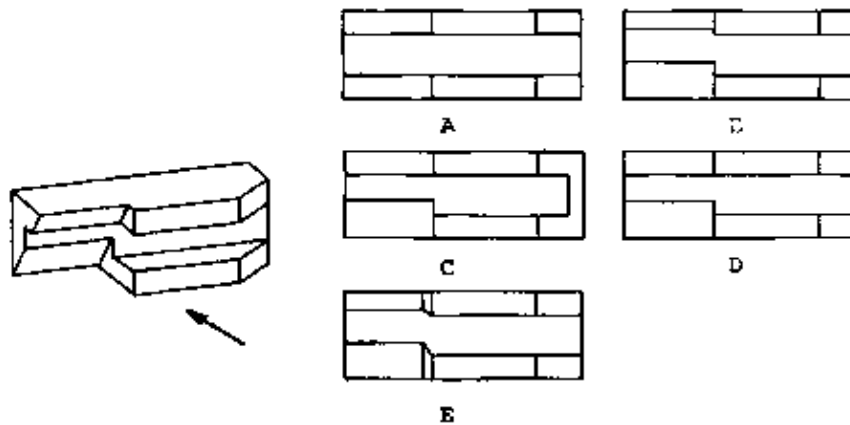
V 17.1: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



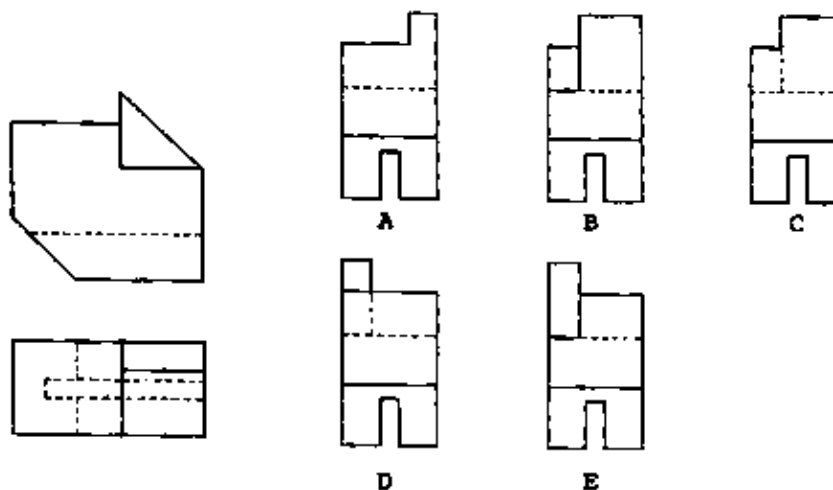
V 17.2: Which picture shows the shortened representation of a long workpiece correctly?



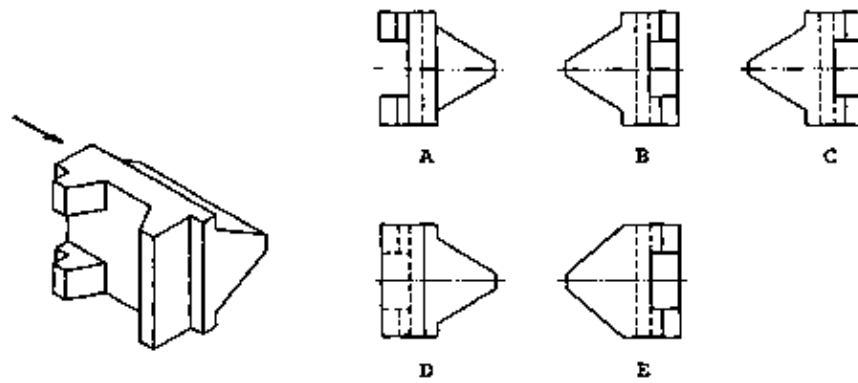
V 17.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



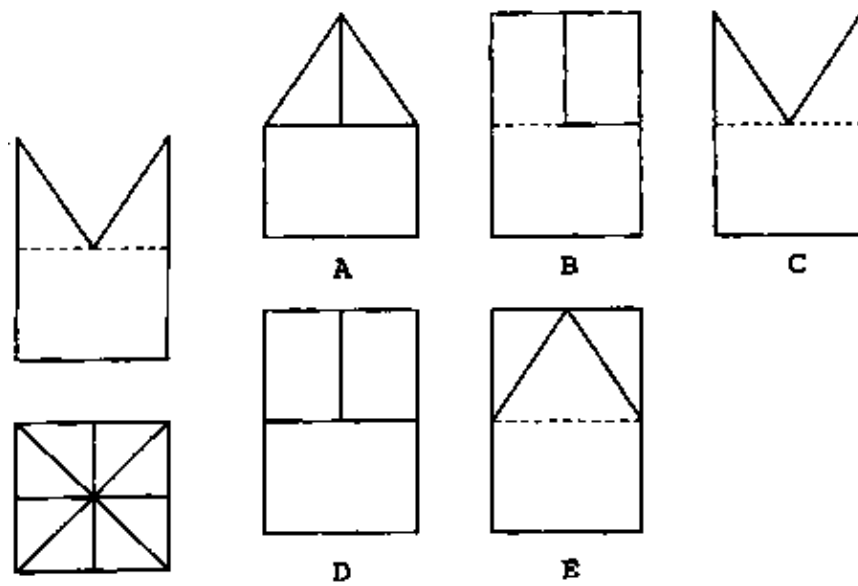
V 18.1: Given: elevation and plan view. Which picture shows the side view correctly?



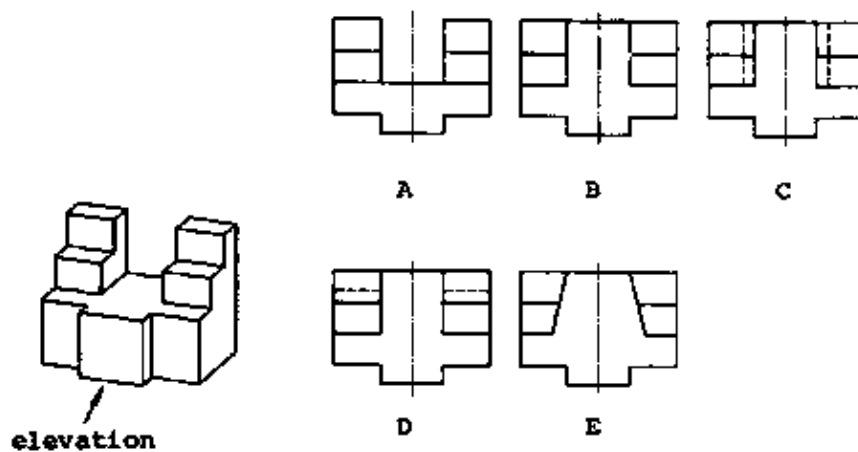
V 18.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



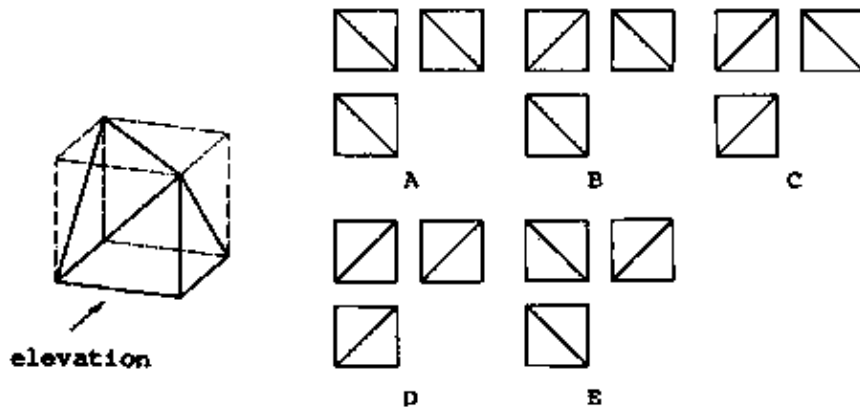
V 18.3: Given: elevation and plan view. Which picture shows the side view correctly?



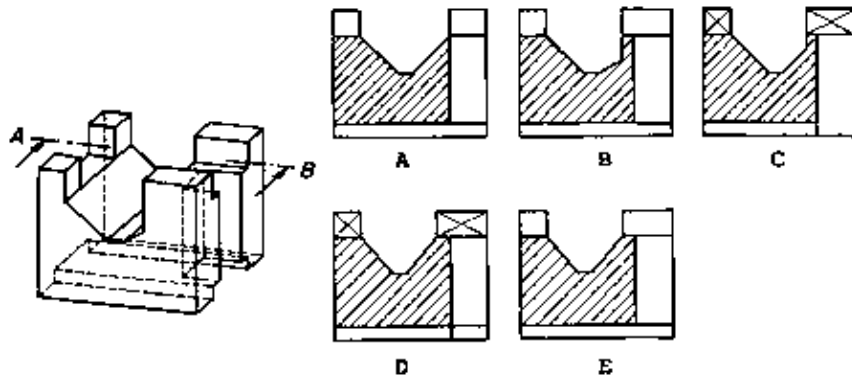
V 19.1: Which picture shows the plan view correctly?



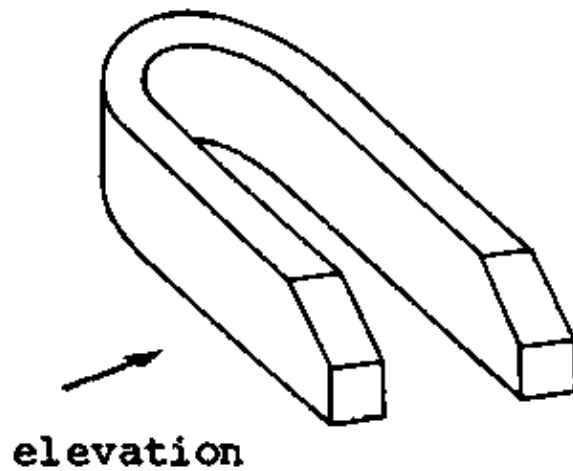
V 19.2: Which set of views gives a correct representation of the prismatic workplace?



V 19.3: Which picture gives a correct sectional view of the the workpiece?

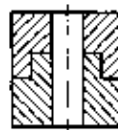
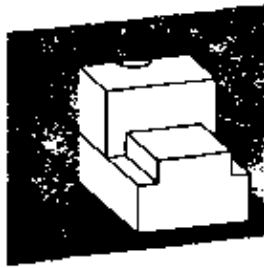


V 20.1: Which views are necessary to give a complete representation of the bow?

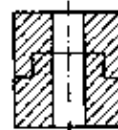


- A. Only plan view.
- B. Only side view.
- C. Elevation and plan view.
- D. Elevation, plan view and side view.
- E. Only elevation.

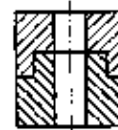
V 20.2: Which of the sectioned views is correct?



A



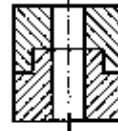
B



C

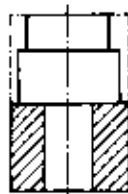
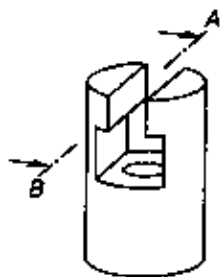


D



E

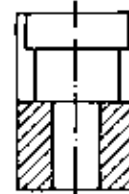
V 20.3: Which picture gives a correct sectional view of the workpiece?



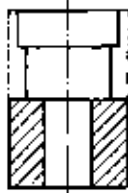
A



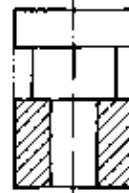
B



C



D



E

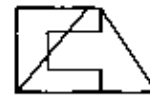
V 21.1: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



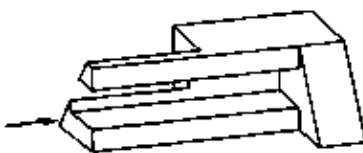
A



B



C

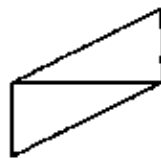
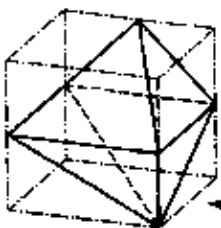


D

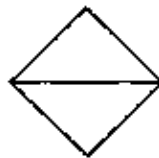


E

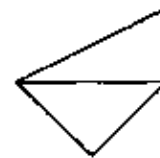
V 21.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



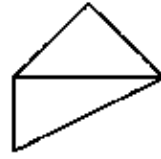
A



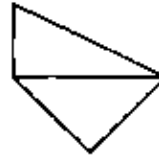
B



C

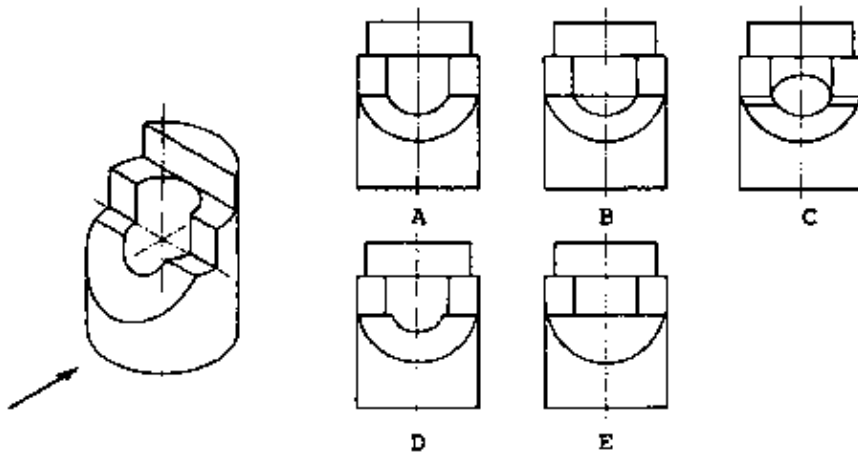


D

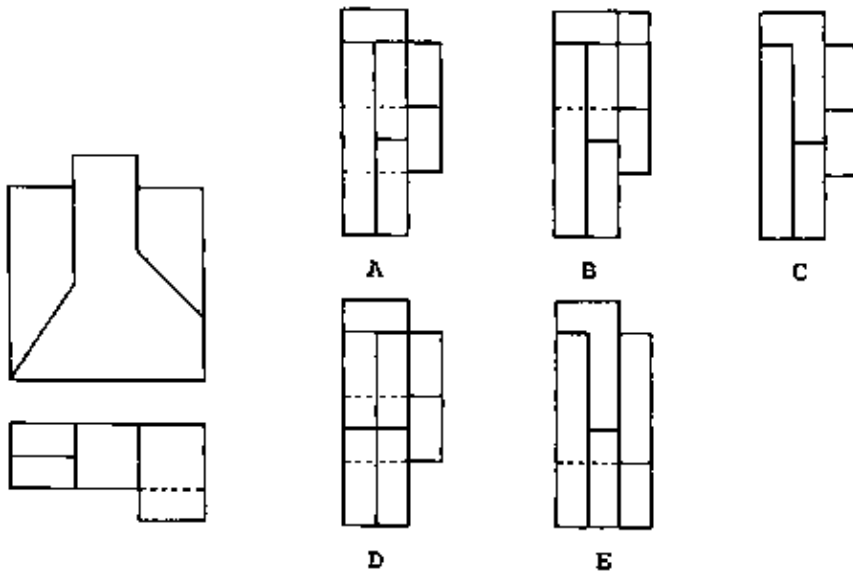


E

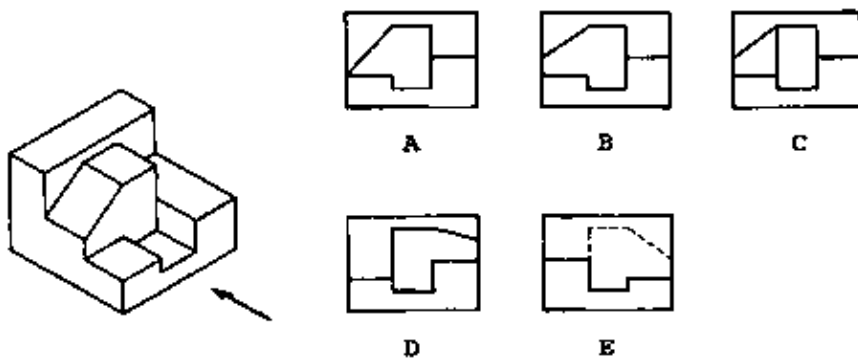
V 21.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



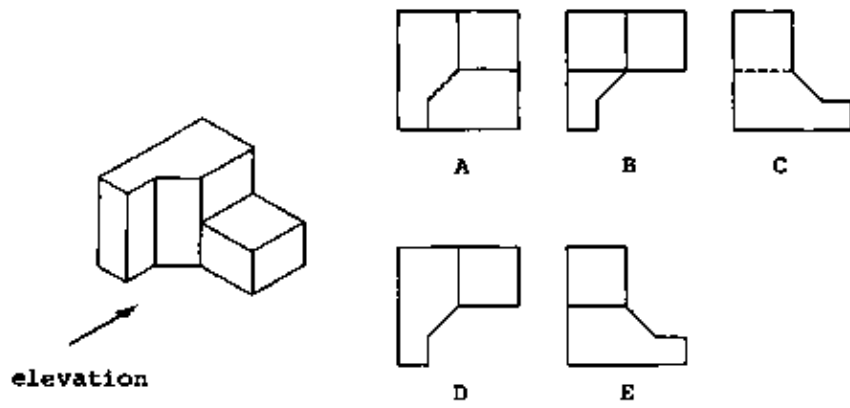
V 22.1: Given: elevation and plan view. Which picture shows the side view correctly?



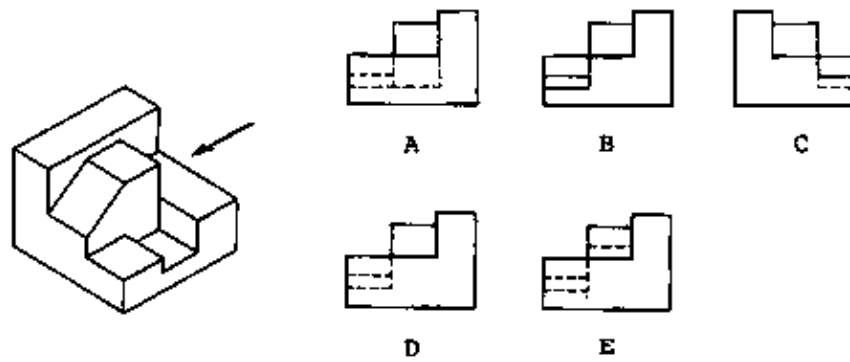
V 22.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



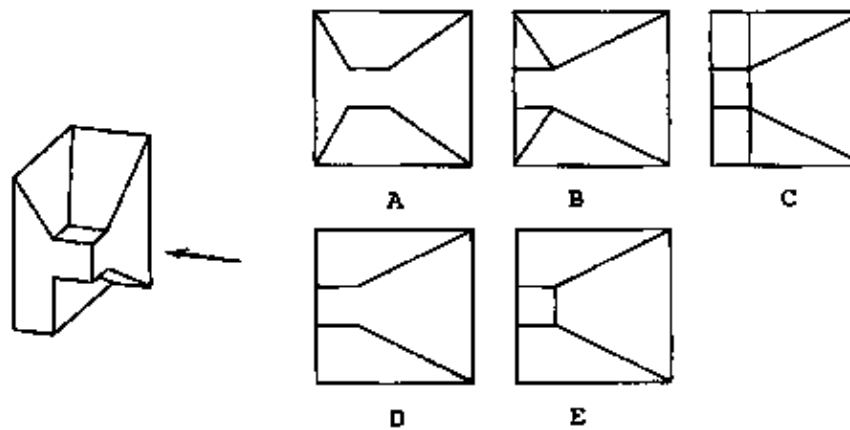
V 22.3: Which picture shows the plan view correctly?



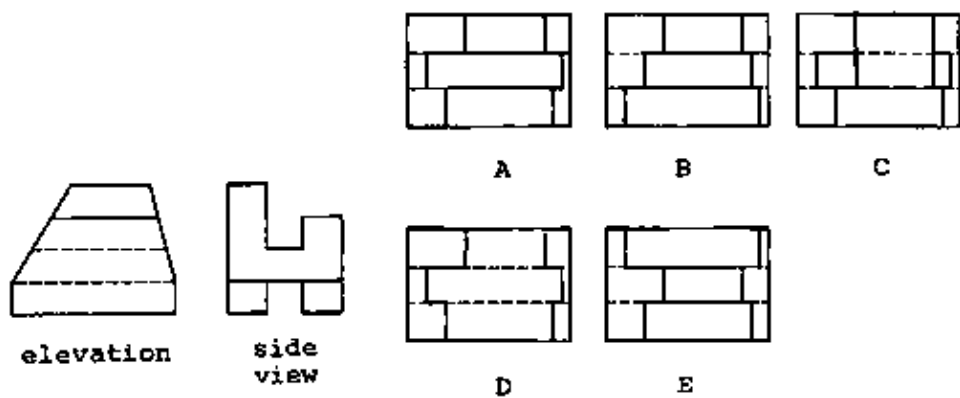
V 23.1: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



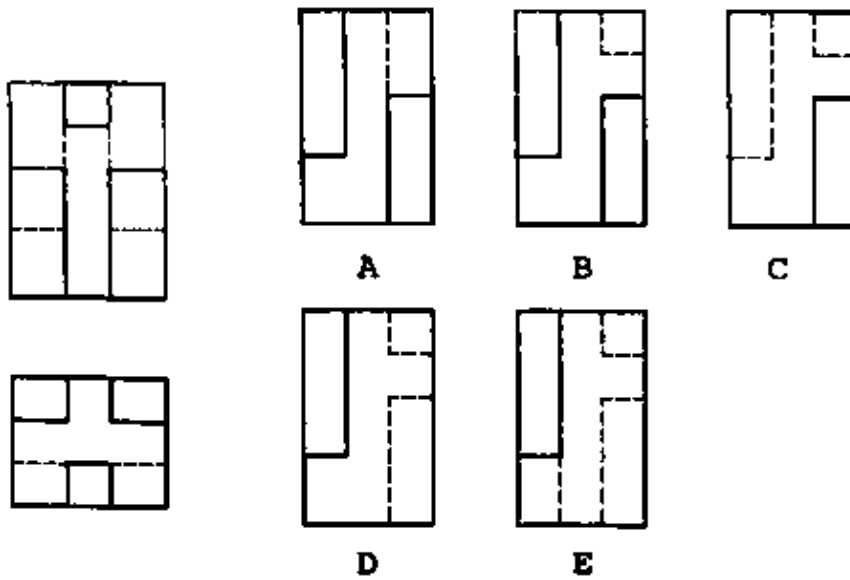
V 23.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



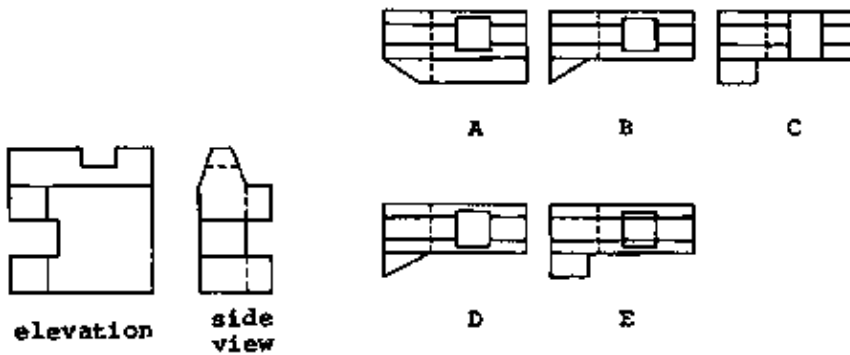
V 23.3: Given: elevation and side view. Which picture shows the plan view correctly?



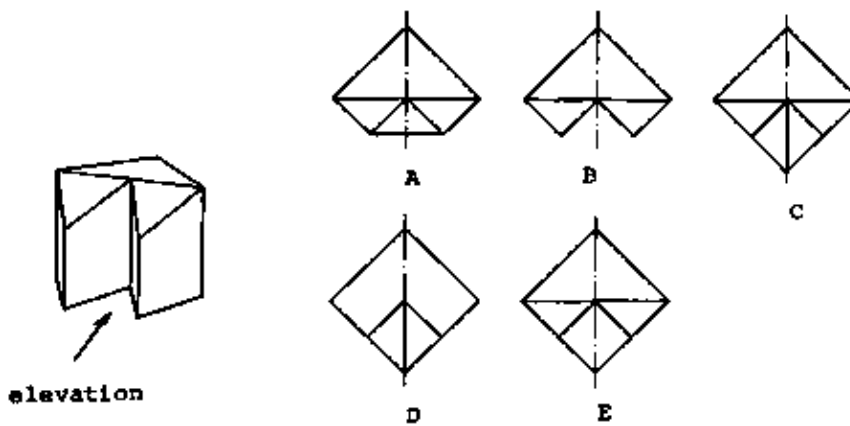
V 24.1: Given: elevation and plan view. Which picture shows the side view correctly?



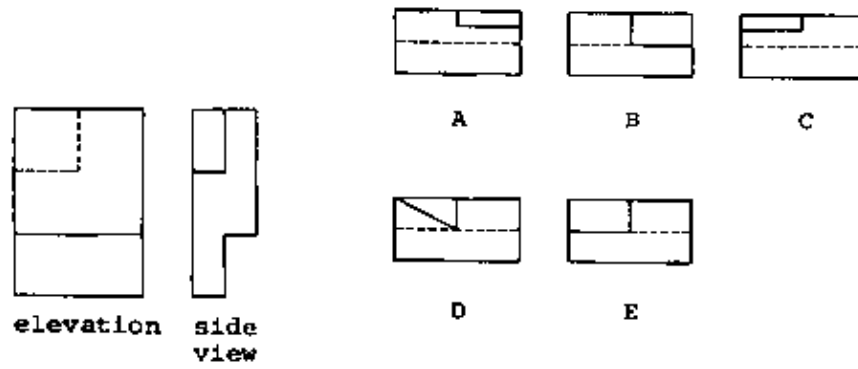
V 24.2: Given: elevation and side view. Which picture shows the plan view correctly? elevation side view



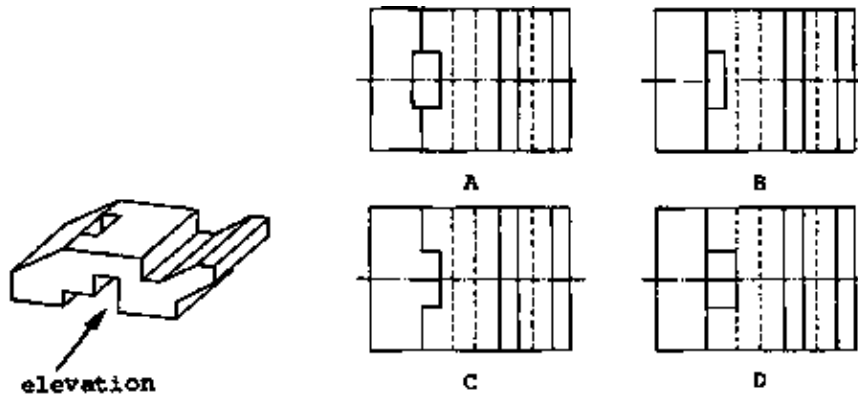
V 24.3: Which picture shows the plan view correctly?



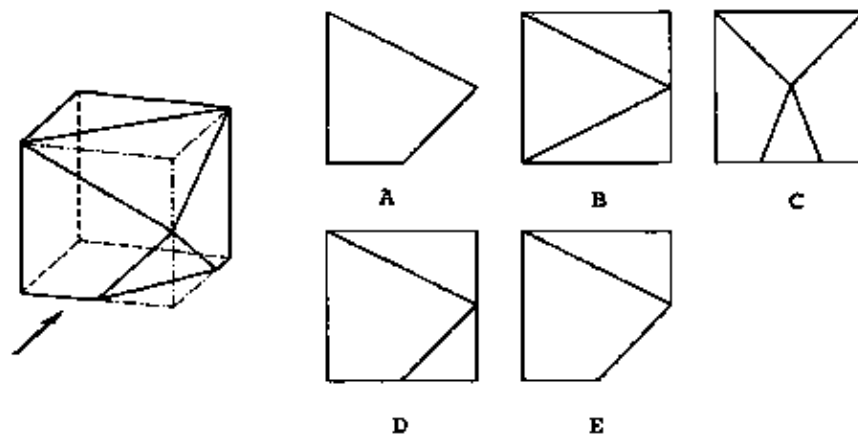
V 25.1: Given: elevation and side view. Which picture shows the plan view correctly?



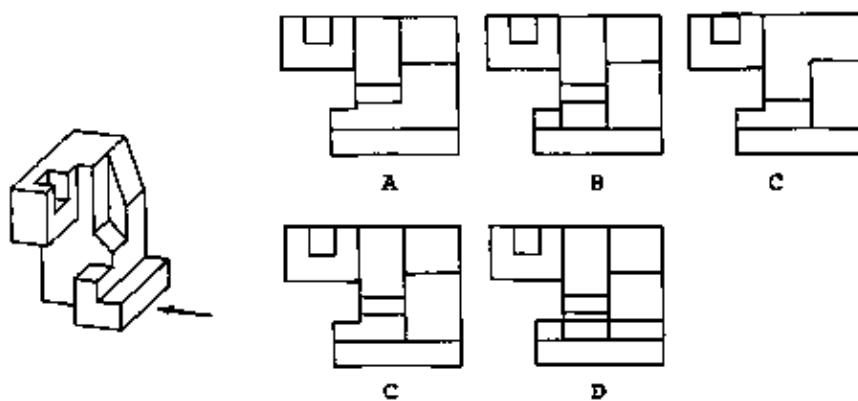
V 25.2: Which picture shows the plan view correctly?



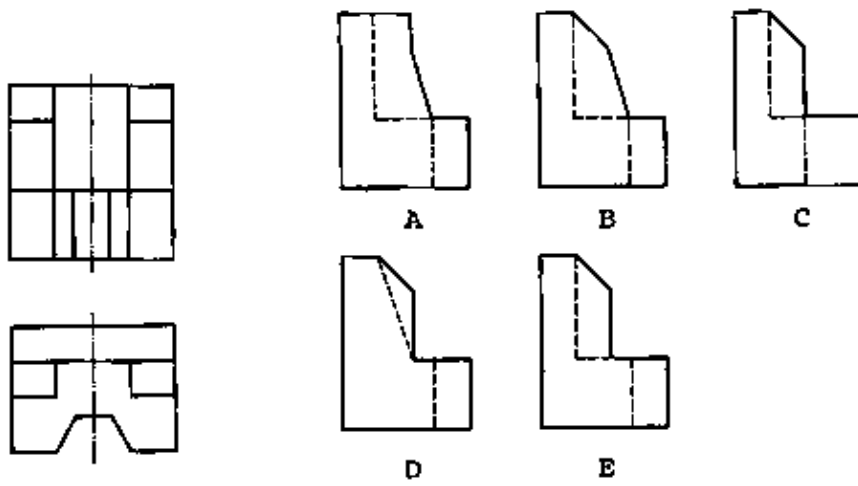
V 25.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



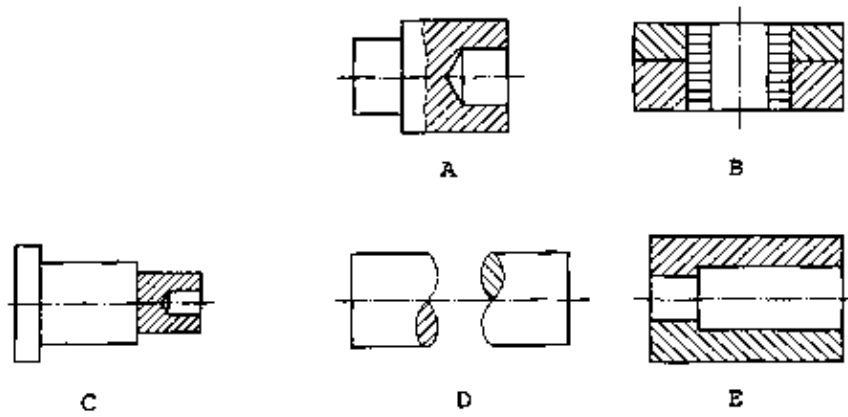
V 26.1: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



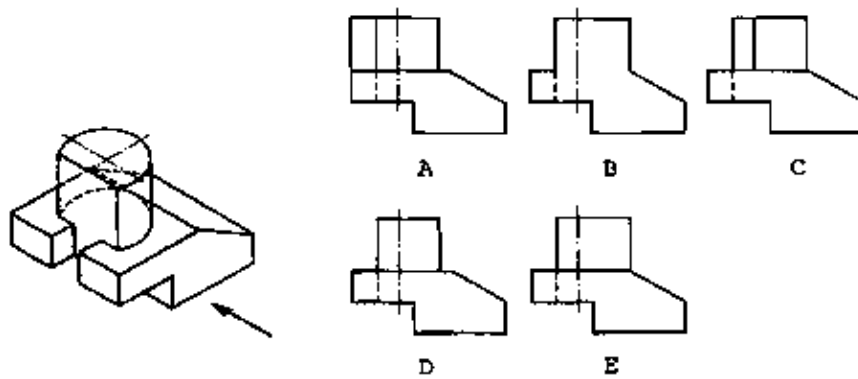
V 26.2: Given: elevation and plan view. Which picture shows the side view correctly?



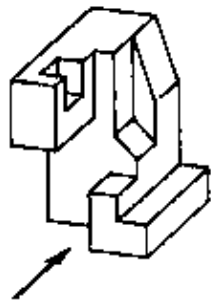
V 26.3: In which of the pictures are the section lines correct?



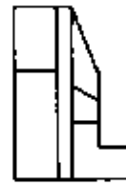
V 27.1: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



V 27.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



A



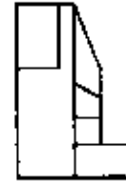
B



C

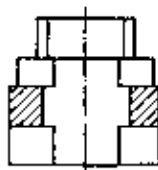
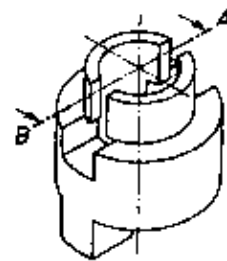


D

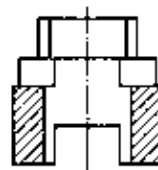


E

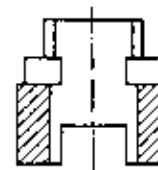
V 27.3: Which picture gives a correct sectional view of the work-piece?



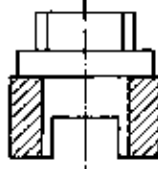
A



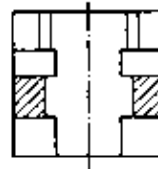
B



C

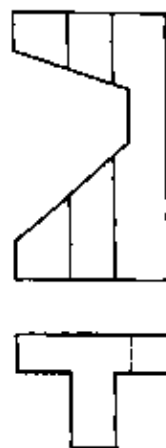


D



E

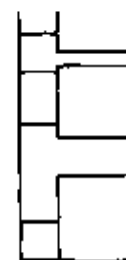
V 28.1: Given: elevation and plan view. Which picture shows the side view correctly?



A



B



C

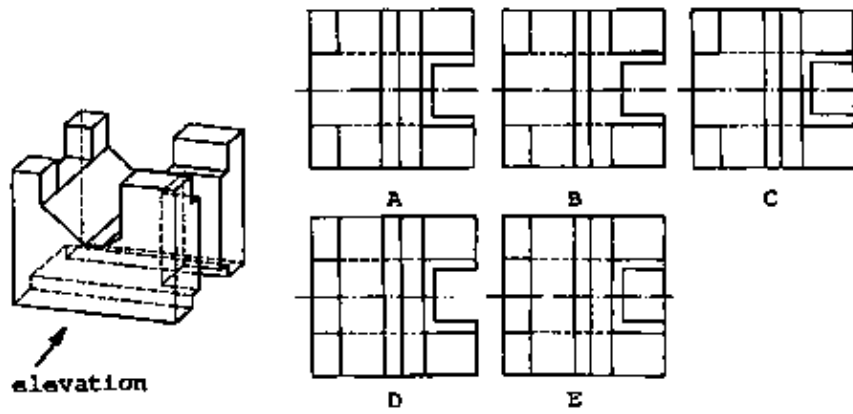


D

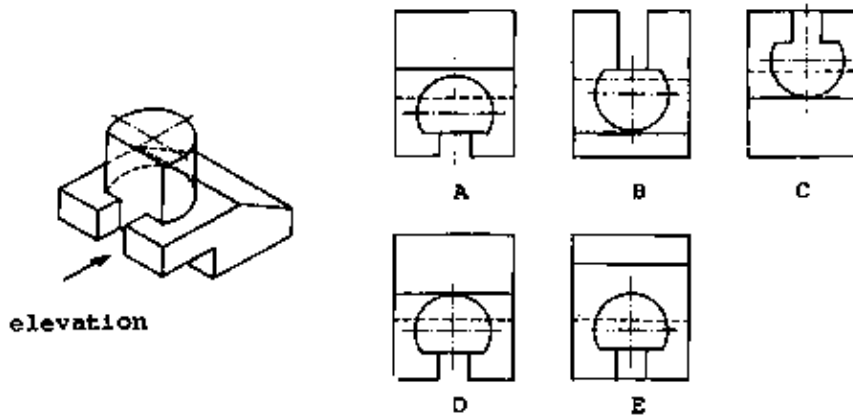


E

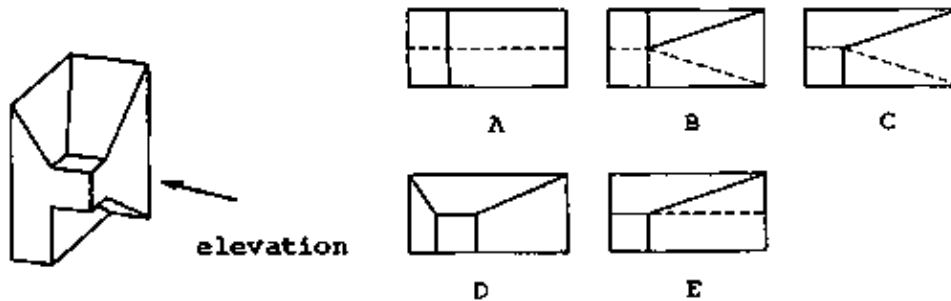
V 28.2: Which picture shows the plan view correctly?



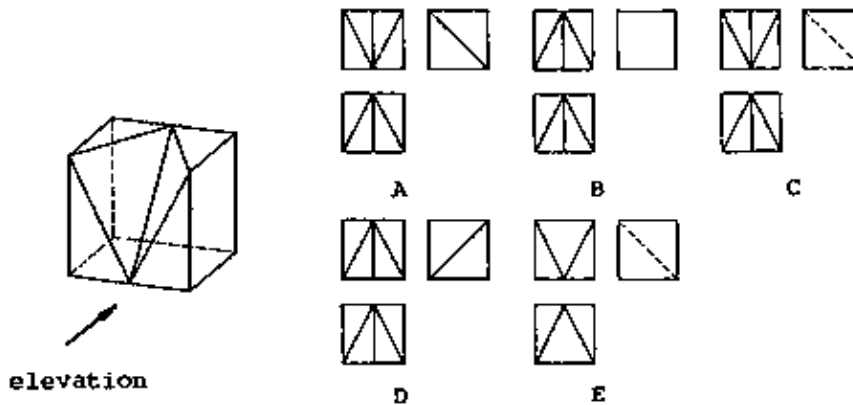
V 28.3: Which picture shows the plan view correctly?



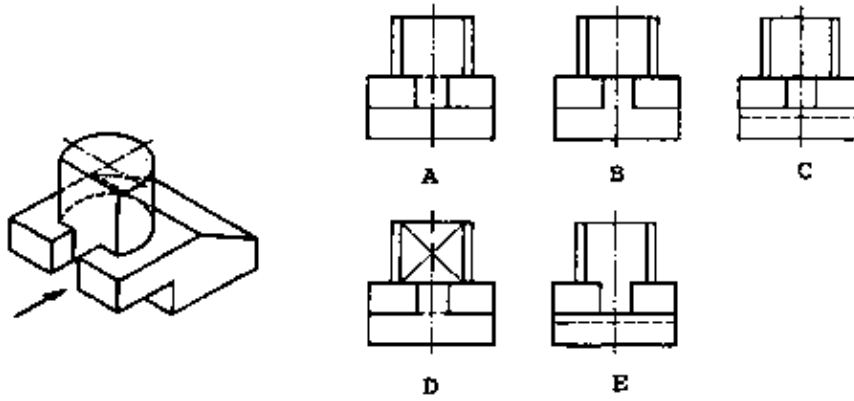
V 29.1: Which picture shows the plan view correctly?



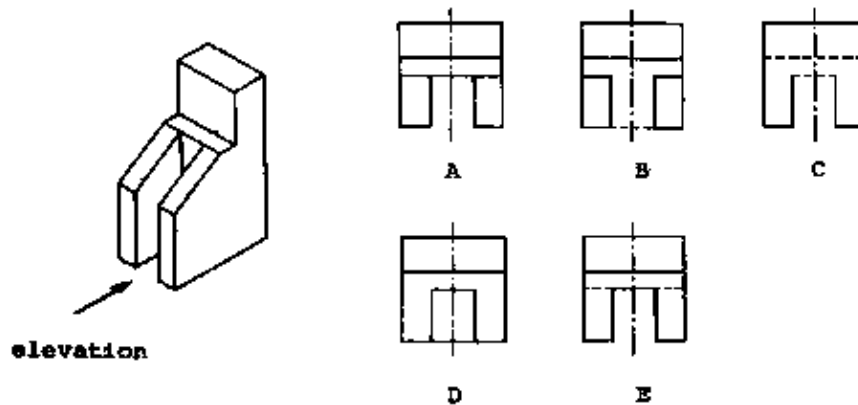
V 29.2: Which set of views gives a correct representation of the prismatic workpiece?



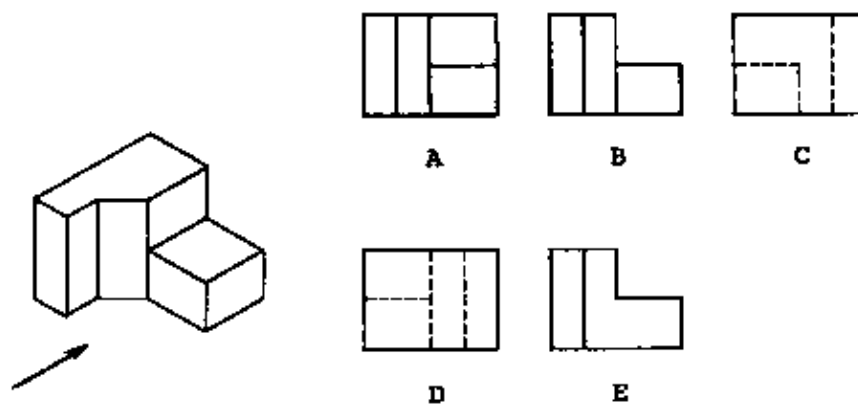
V 29.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



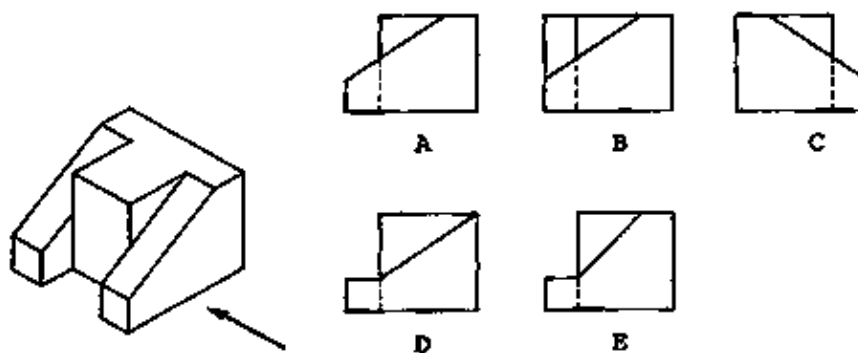
V 30.1: Which picture shows the plan view correctly?



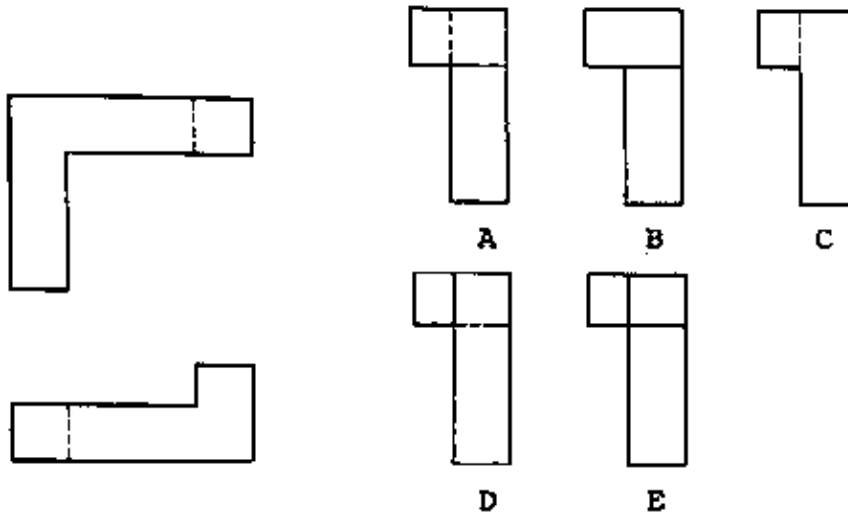
V 30.2: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



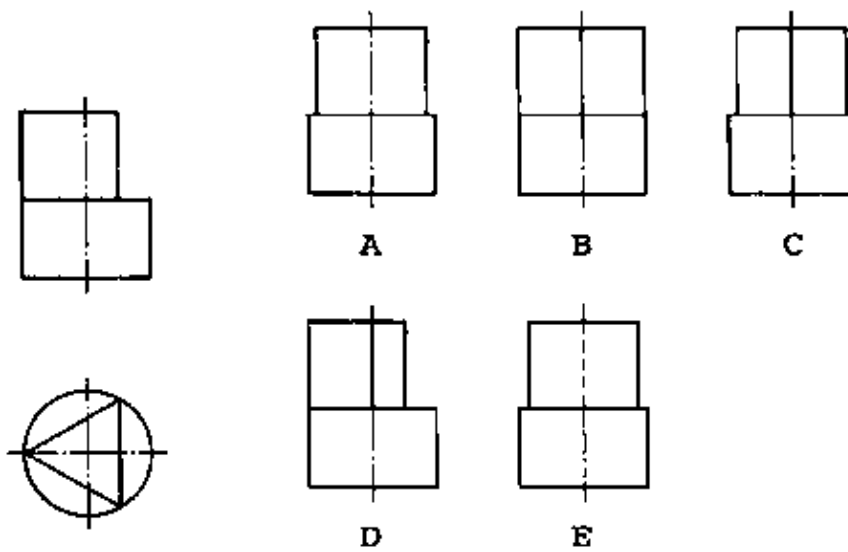
V 30.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?



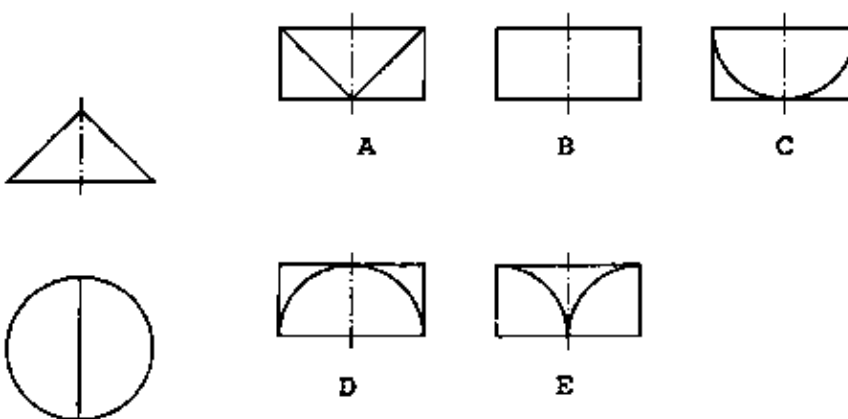
V 31.1: Given: elevation and plan view. Which picture shows the side view correctly?



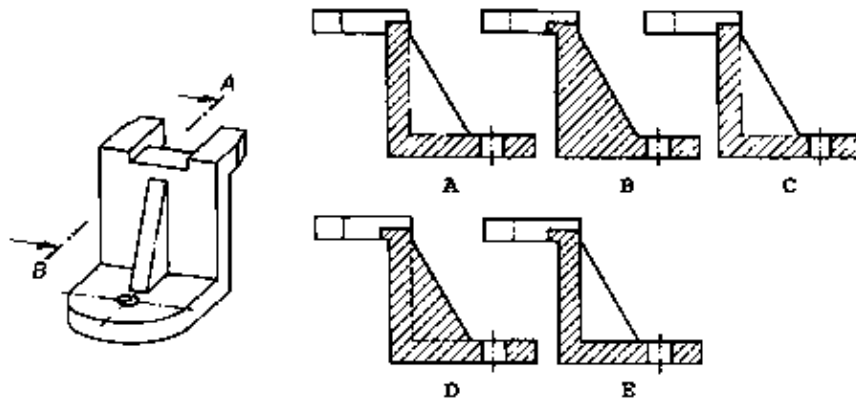
V 31.2: Given: elevation and plan view. Which picture shows the side view correctly?



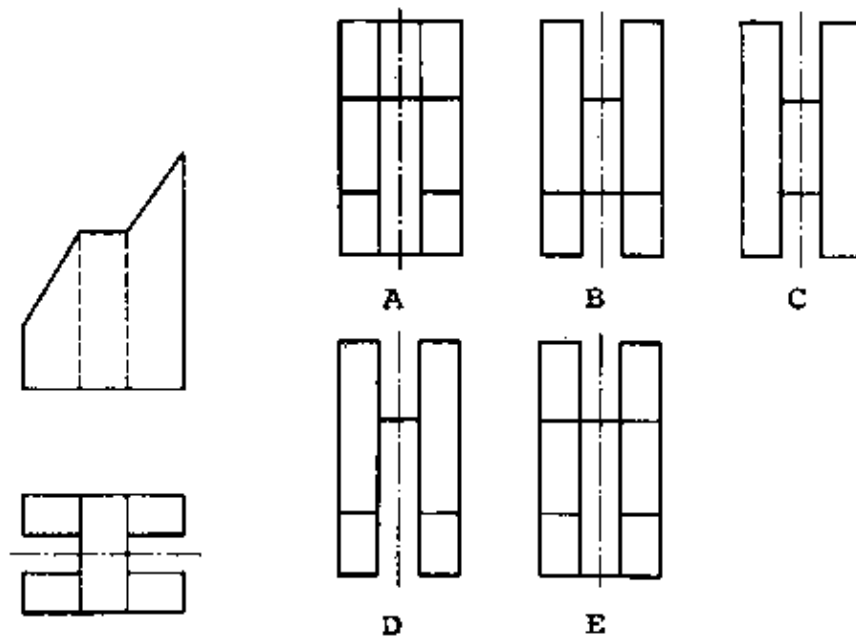
V 31.3: Given: elevation and plan view. Which picture shows the side view correctly?



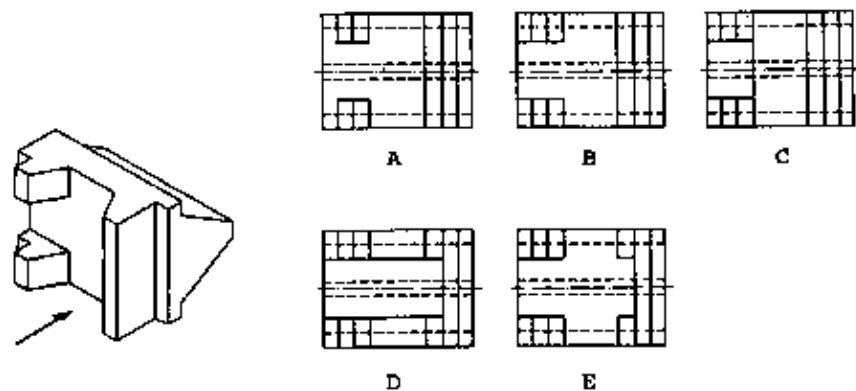
V 32.1: Which picture gives a correct sectional view of the workpiece?



V 32.2: Given: elevation and plan view. Which picture shows the side view correctly?

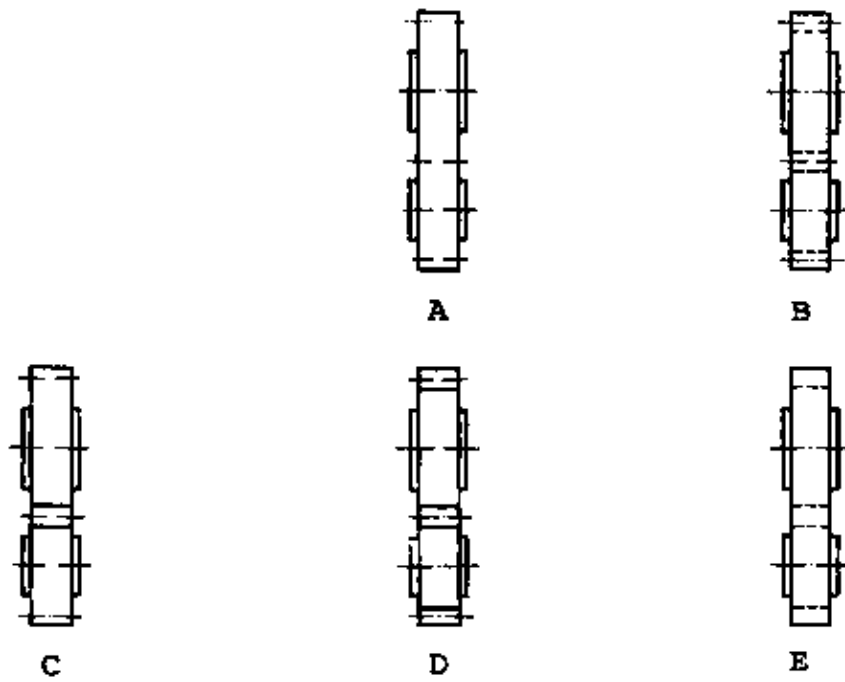


V 32.3: If you look in the direction of the dart, which picture shows the correct view of the workpiece?

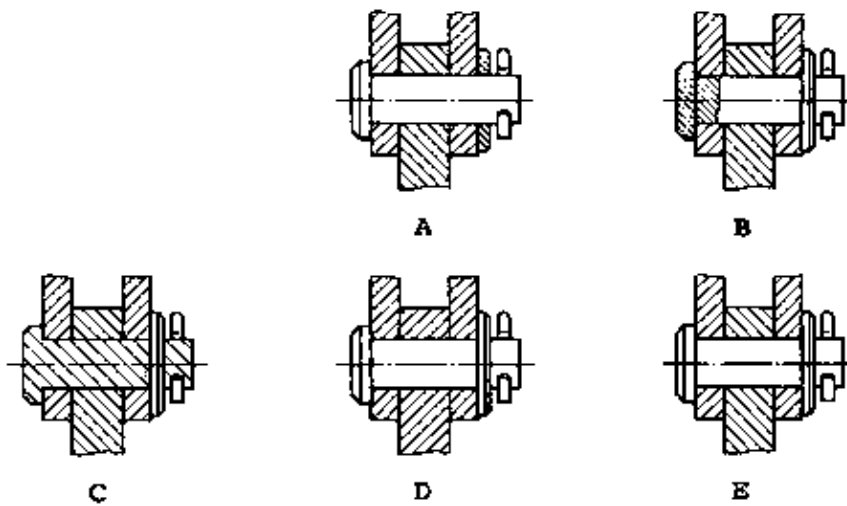


MACHINE ELEMENTS

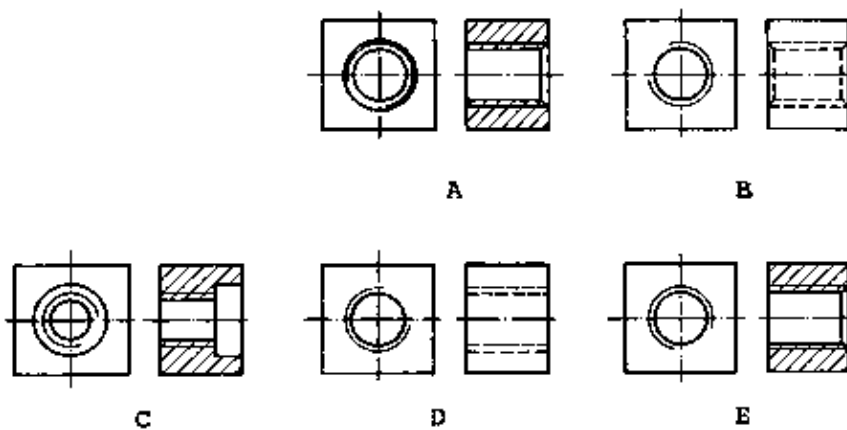
ME 1.1: Which of the pictures gives a correct non-sectioned side view of a pair of spur gears?



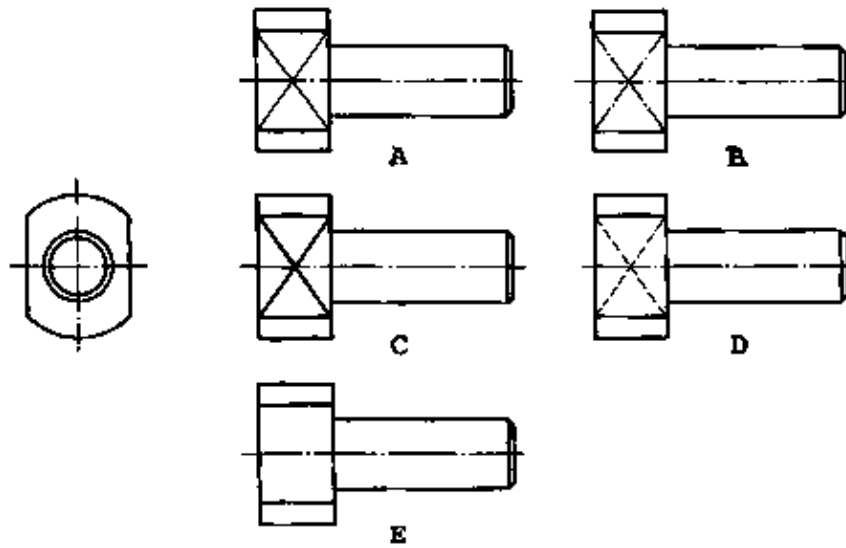
ME 1.2: Which of the pictures shows a correct section of the joint?



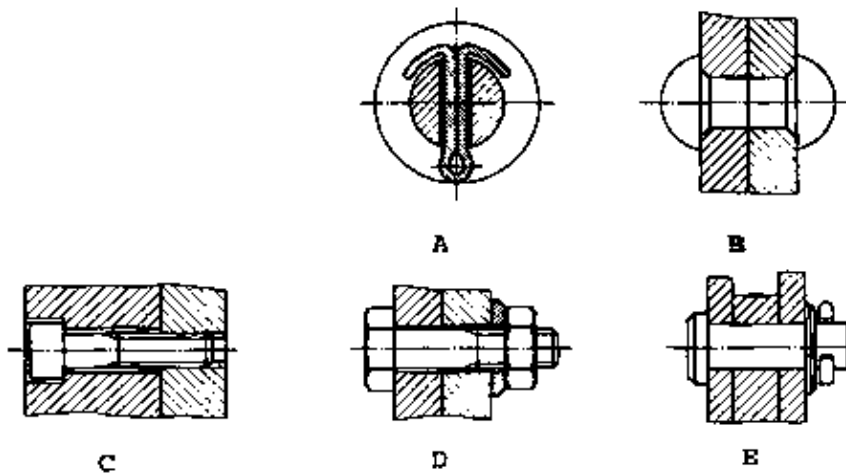
ME 1.3: In which of the pictures is the internal thread not shown correctly?



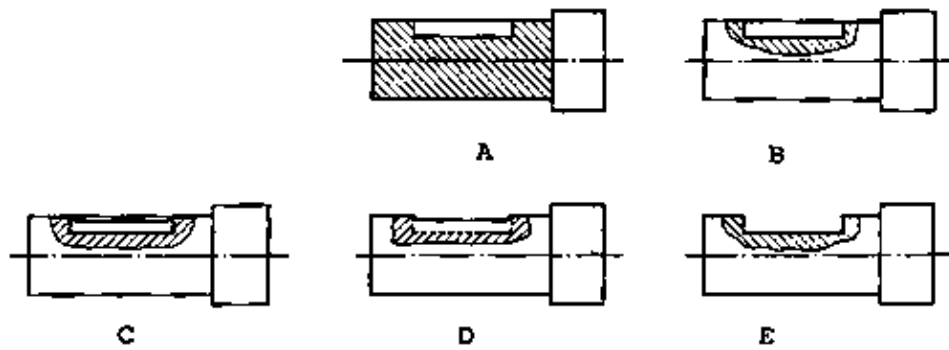
ME 2.1: Which of the pictures shows the correct representation of the flats?



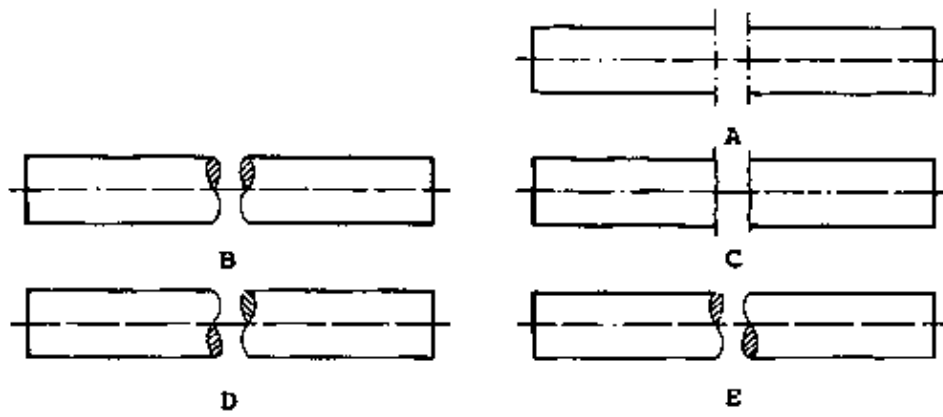
ME 2.2: Which of the joints is shown in a correct –sectional representation?



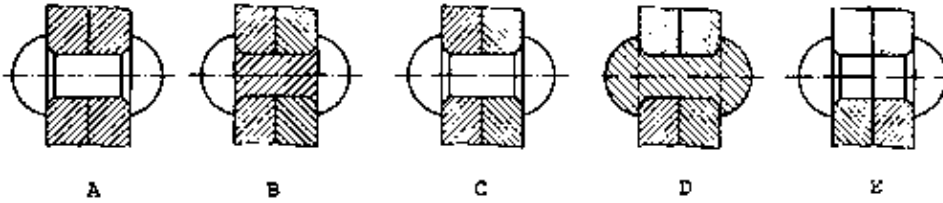
ME 2.3: Which picture shows the keyway in a correct representation?



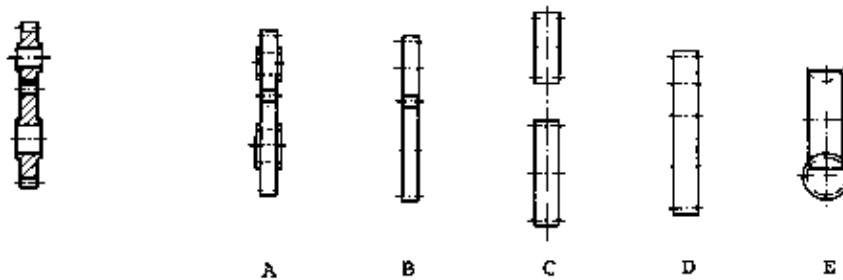
ME 3.1: In which of the pictures is the shaft shown correctly?



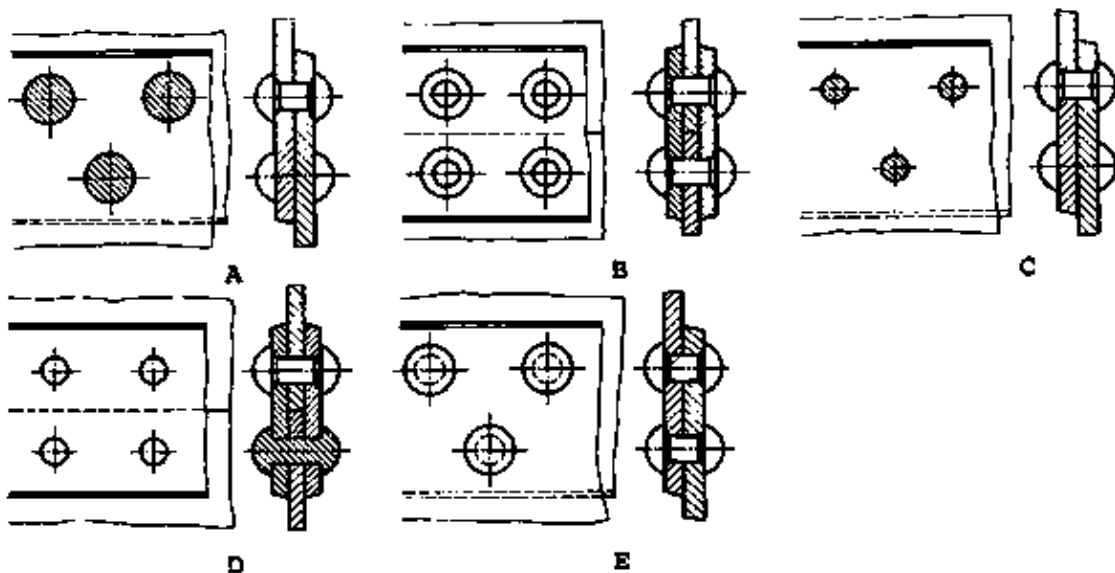
ME 3.2: In which of the pictures is the rivet-joint shown correctly in sectional representation?



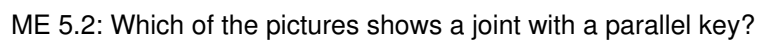
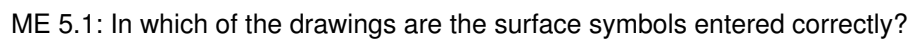
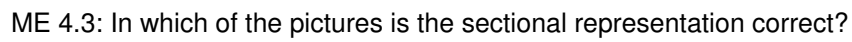
ME 3.3: Which picture is the simplified representation of the pair of gears shown in sectional view?

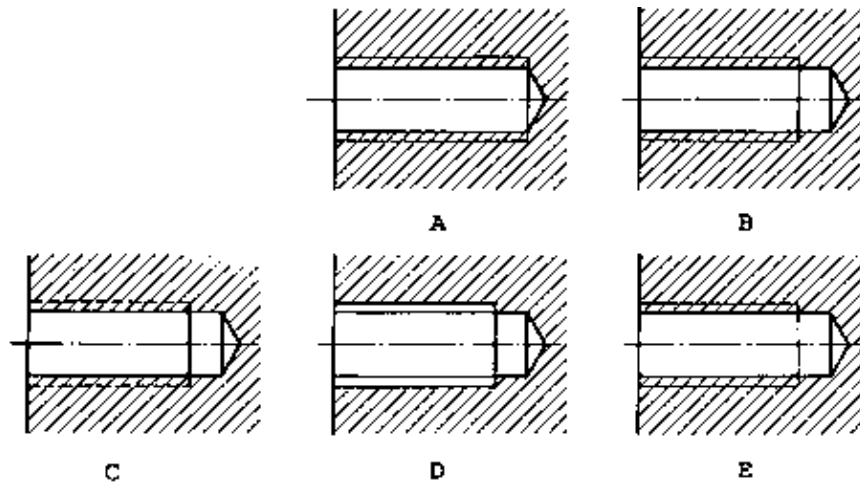


ME 4.1: In which of the pictures is the rivet joint shown correctly?

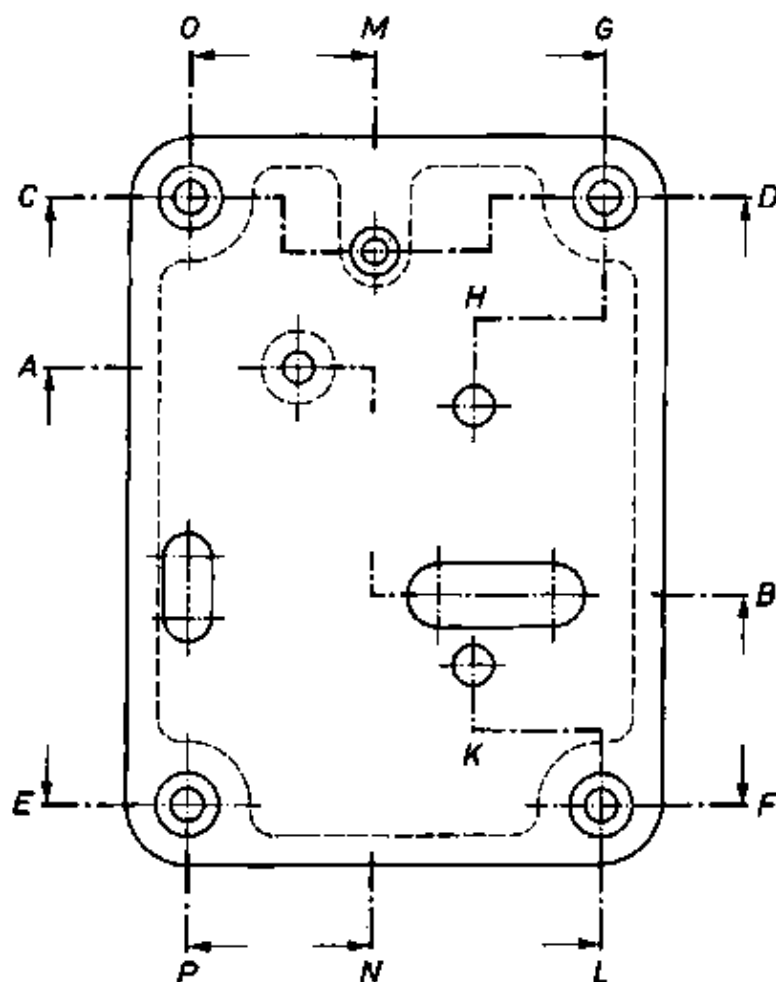


ME 4.2: Which picture gives a correct representation of the bearing cover?

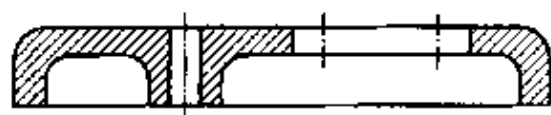




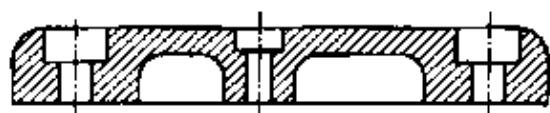
ME 6.1: The drawing below shows a bearing cover with several sections. Which of the 5 sectional views shows the section G–L?



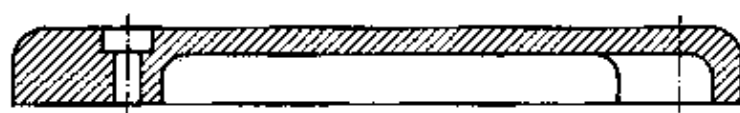
A



B



C

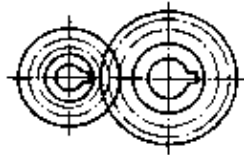


D

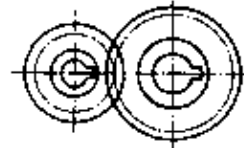


E

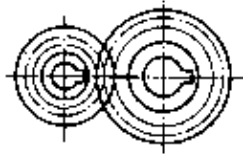
ME 7.1: Which picture shews the correct representation of a pair of spur gears?



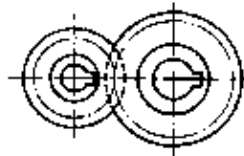
A



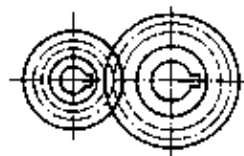
B



C

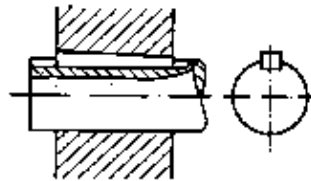


D

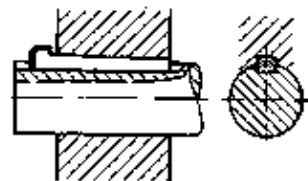


E

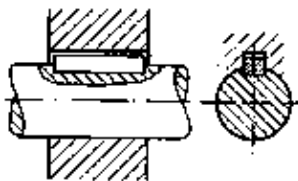
ME 7.2: Which picture shows a joint with a hollow key?



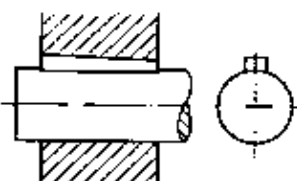
A



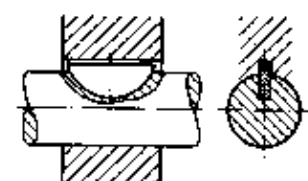
B



C

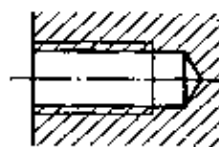


D

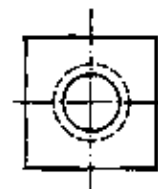


E

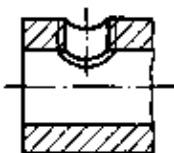
ME 7.3: Which picture shows a thread according to ISO-standards?



A



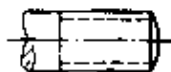
B



C

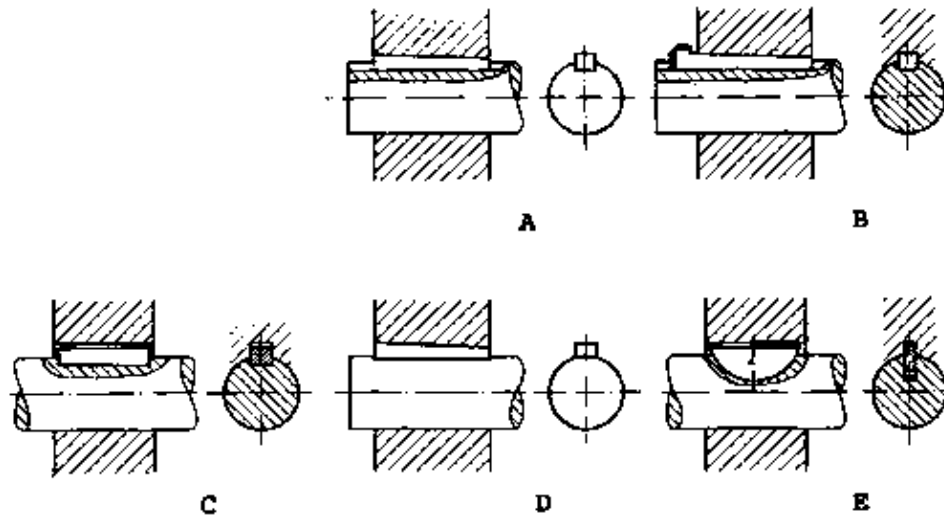


D

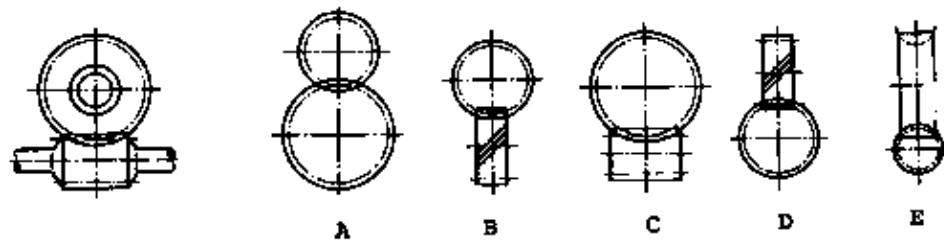


E

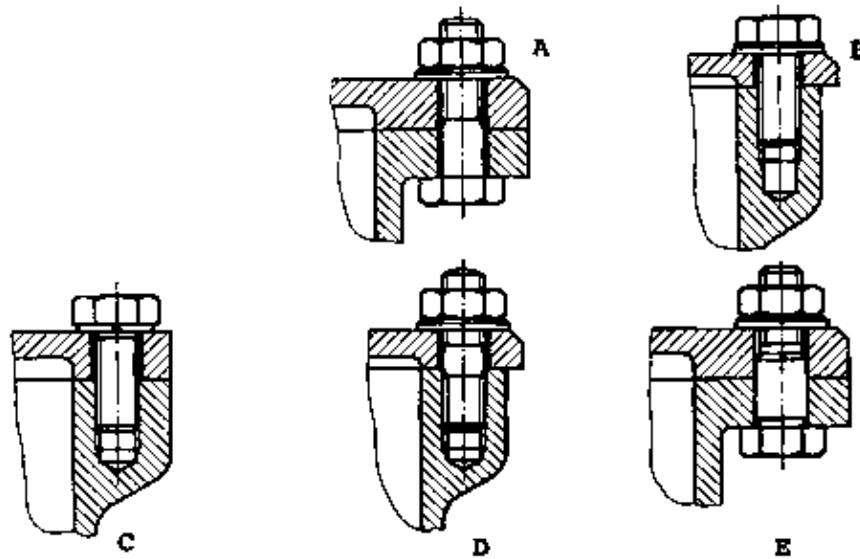
ME 8.1: Which of the pictures shows a joint with a woodruff key?



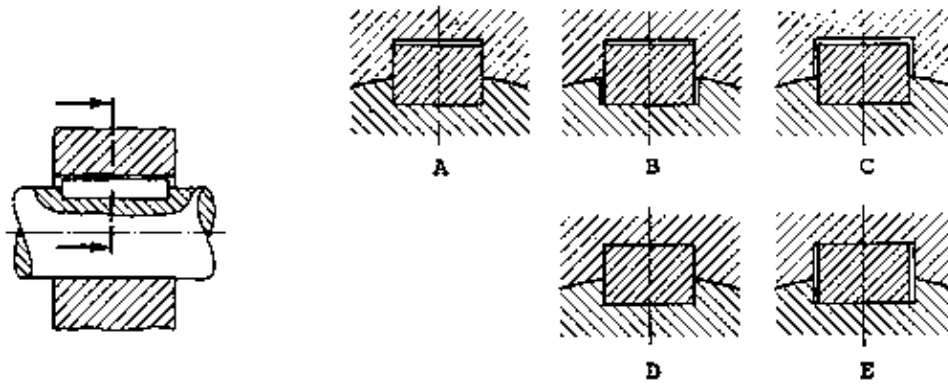
ME 8.2: Which picture is the simplified representation of the pair of gears shown in the sectional view?



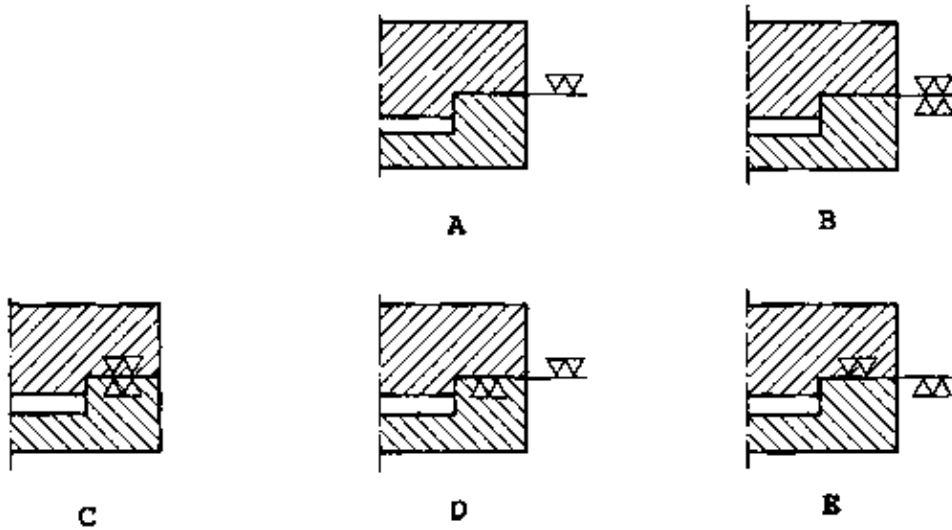
ME 8.3: Which of the pictures shows a joint with a fitting bolt?



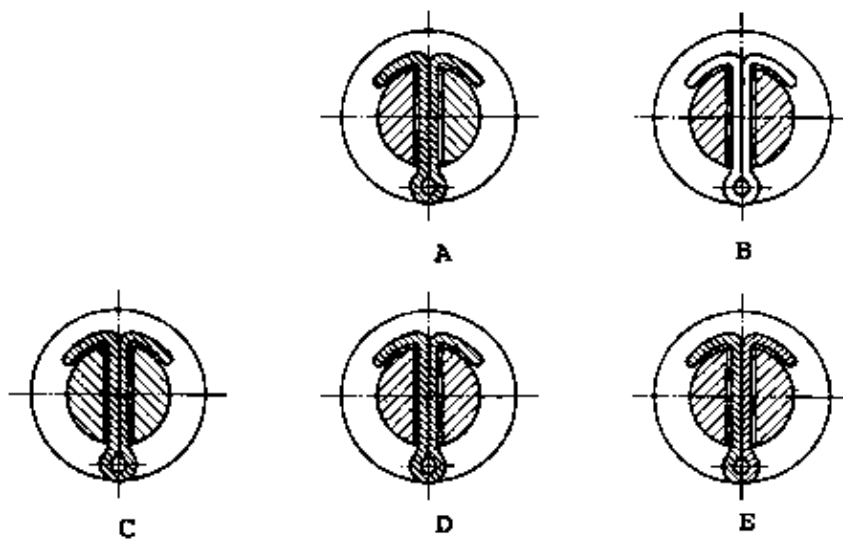
ME 9.1: Which of the pictures shows the partial section of the key joint correctly?



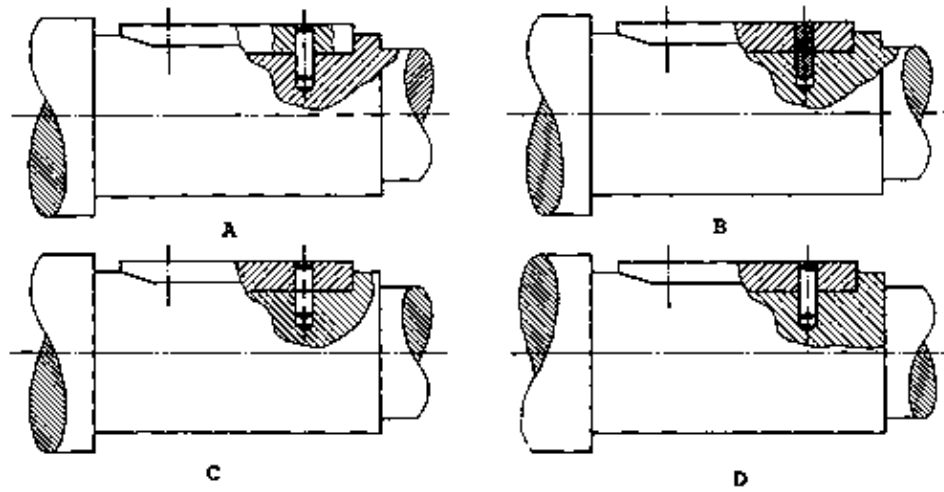
ME 9.2: Both the contacting surfaces shall be smoothed. Which of the pictures gives a correct representation?



ME 9.3: In which of the pictures is the sectional representation of a joint with a split pin shown correctly?

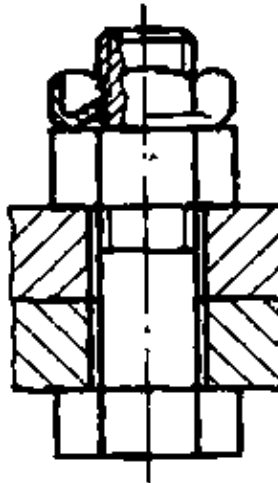


ME 10.1: In which of the pictures is the partial section shown correctly?

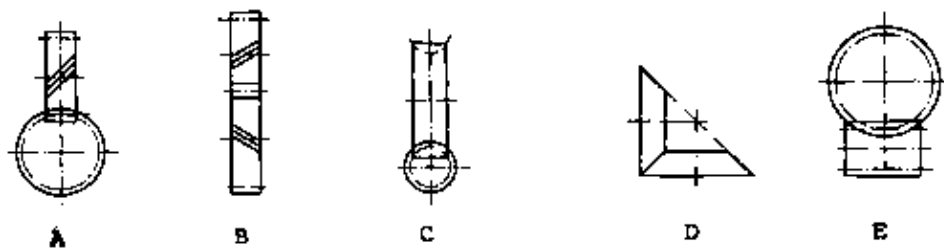


ME 10.2: Which locking device is used in this screw joint?

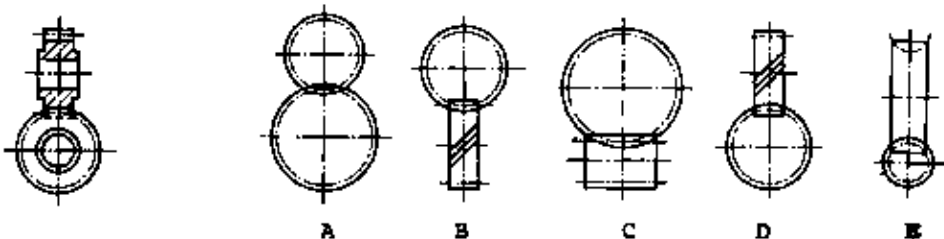
- A. Locking lap
- B. Double nut
- C. Locking nut
- D. Safety hexagon nut
- E. Fan disk



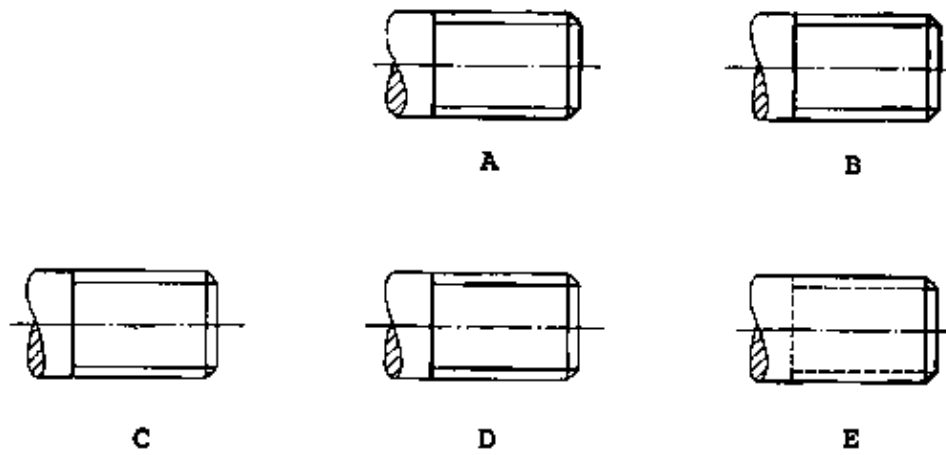
ME 10.3: Which of the pictures shows the simplified representation of a pair of bevel gears?



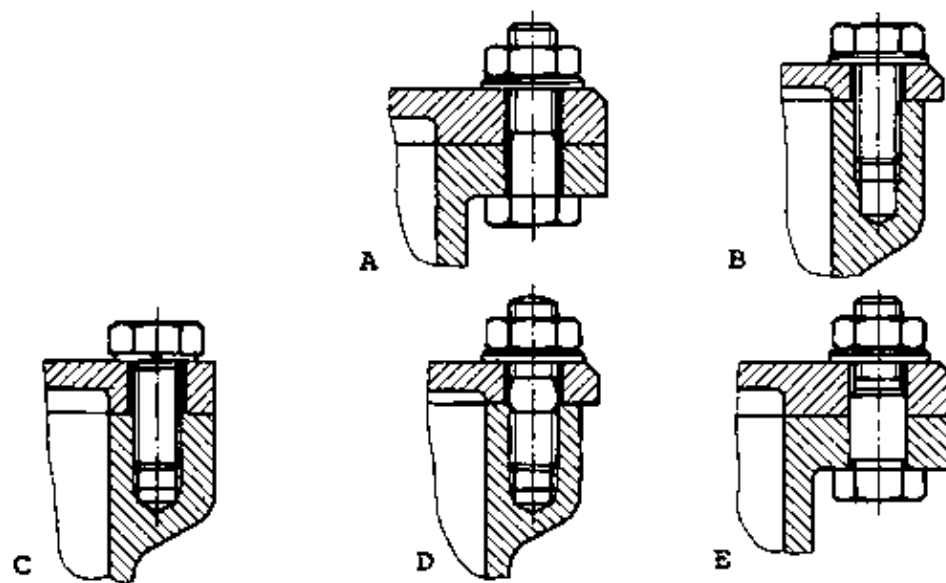
ME 11.1: Which picture is the simplified representation of the pair of gears shown in sectional view?



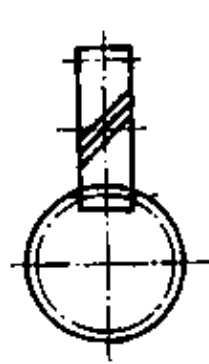
ME 11.2: Which picture shows an external thread according to ISO-standards?



ME 11.3: Which of the pictures shows a joint with a tap bolt?



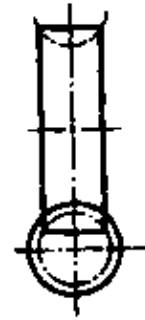
ME 12.1: Which picture is a simplified representation of a pair of bevel gears?



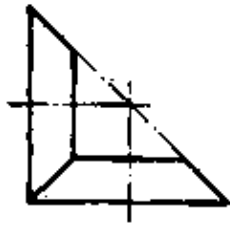
A



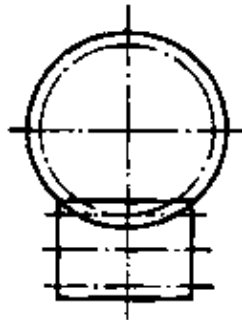
B



C



D

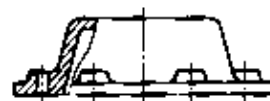


E

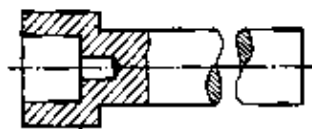
ME 12.2: Which picture gives a correct sectional representation of the respective workpiece?



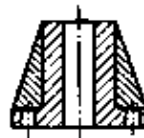
A



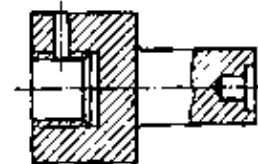
B



C

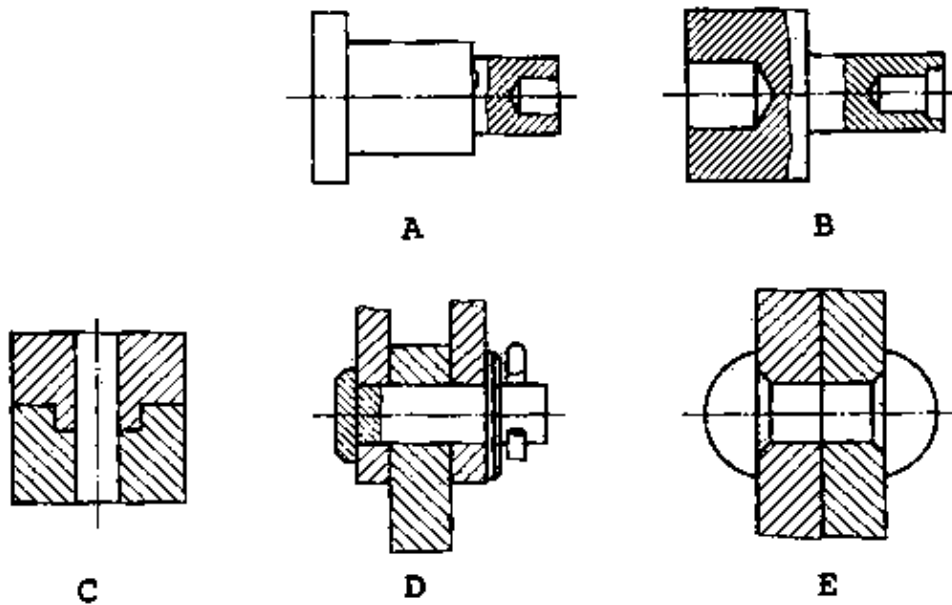


D

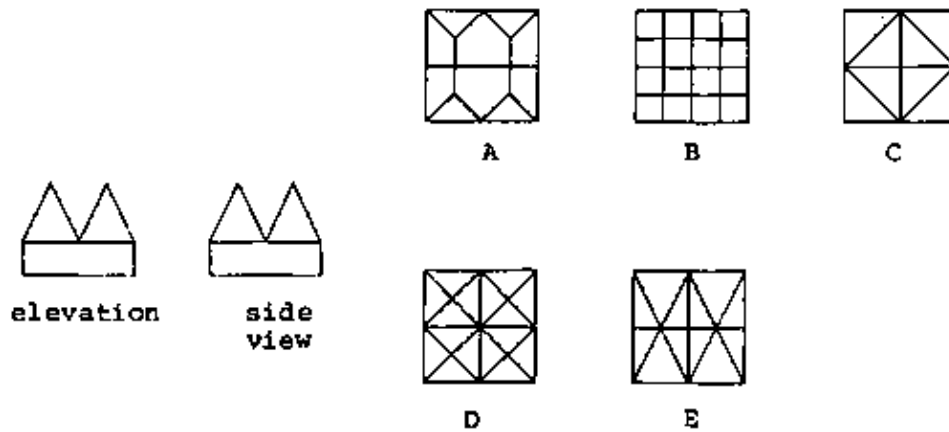


E

ME 12.3: Which picture gives a correct sectional representation of the respective workpiece?

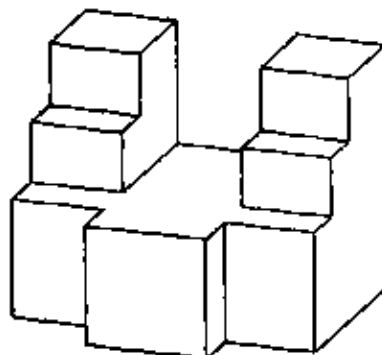


ME 13.1: Given: Elevation and side view. Which picture shows the correct top view?

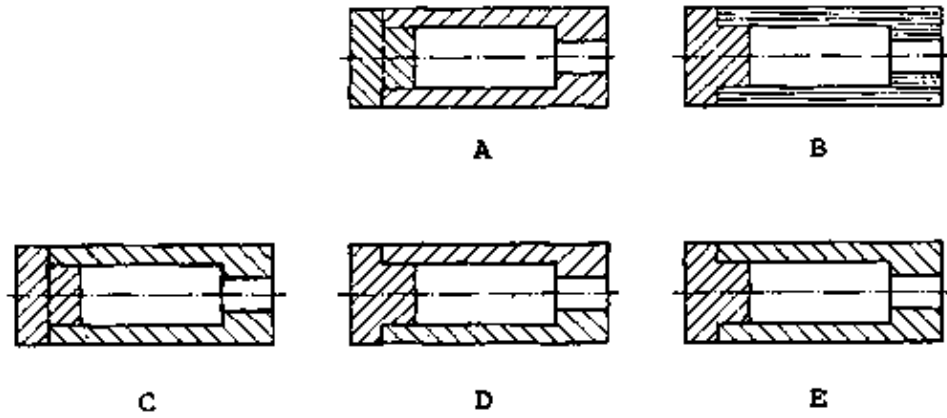


ME 13.2: Which view(s) is (are) necessary to give a clear representation of this body?

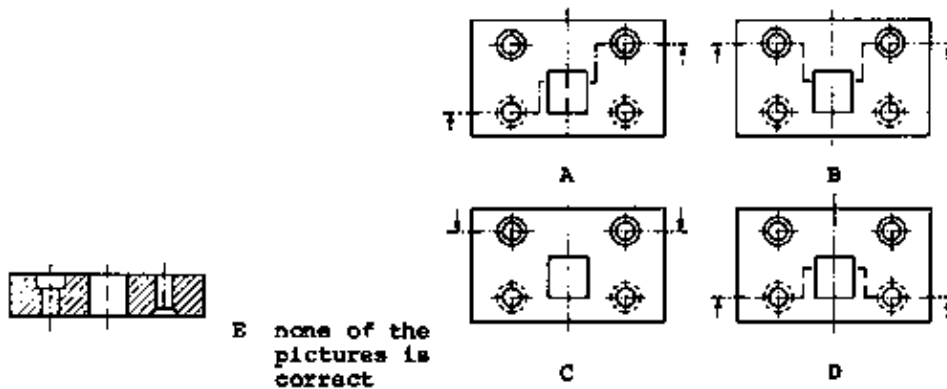
- A. Elevation alone is sufficient.
- B. Side view alone is sufficient.
- C. Only elevation and top view are required.
- D. Elevation, top view and side view are required.
- E. Only elevation and side view are required.



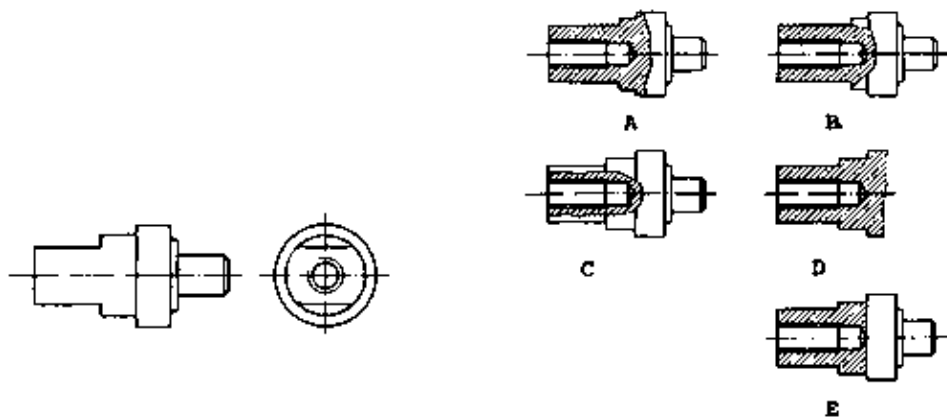
ME 13.3 which of the full sections of a bush with cover piece is correct?



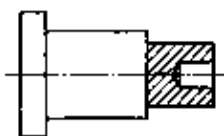
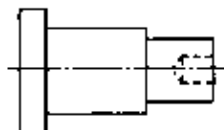
ME 14.1: Which of the four pictures shows the correct course of the section lines of the offset section shown below?



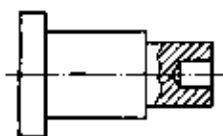
ME 14.2: Which of the five pictures shows a correct sectional representation of the workpiece below?



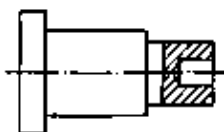
ME 14.3: Which of the five pictures shows a correct sectional representation of the stepped bolt?



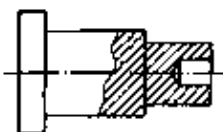
A



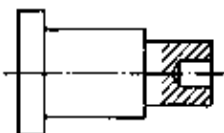
B



C



D



E