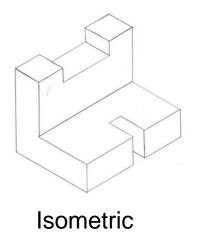


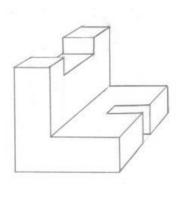
Language of Sketching

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Pictorial Drawing

- 2D illustration of a 3D object
- Shows three faces of an object in one view
- Provides a realistic view of an object
- Types of drawings



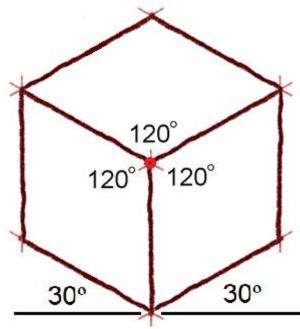


Perspective

Isometric Pictorial

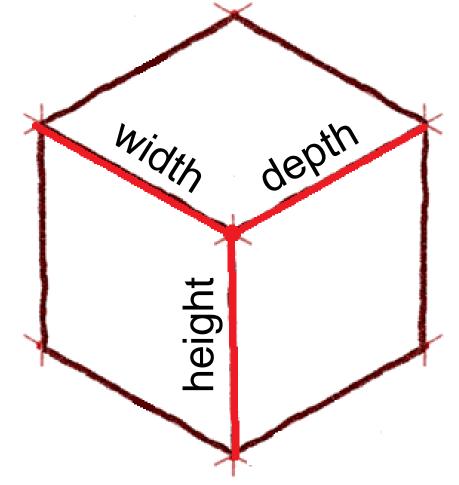
Isometric means equal measure.

- Three adjacent faces on a cube will share a single point
- Edges converge at one point will appear as 120 degree angles or 30 degrees from the horizon line

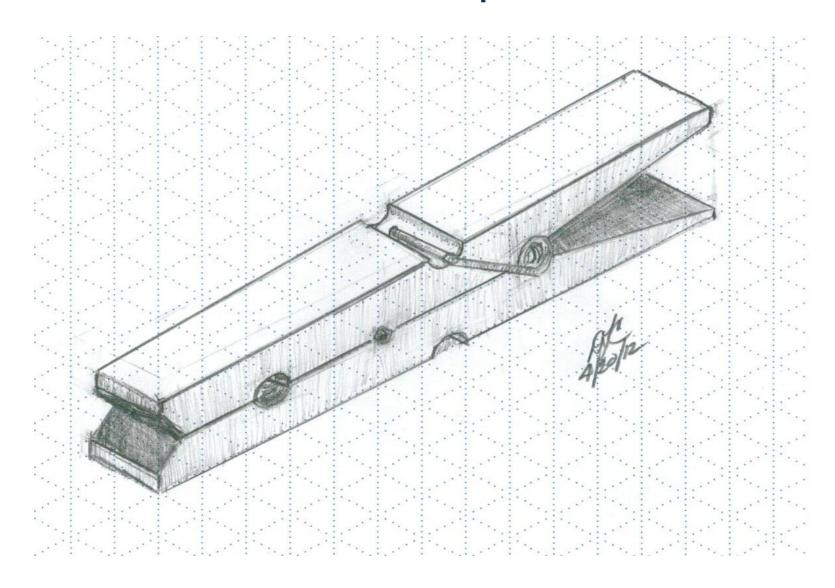


Isometric Pictorial

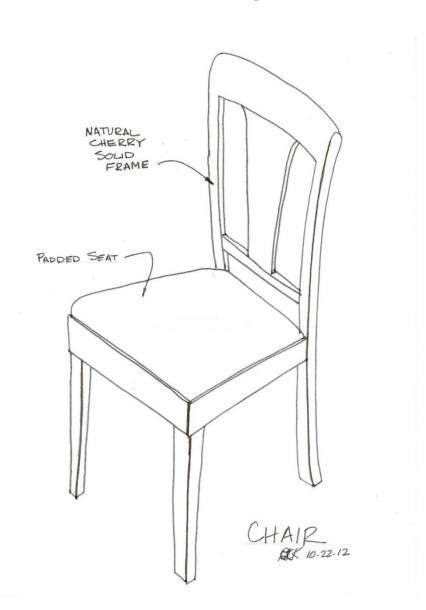
 These three edges represent height, width, and depth



Isometric Sketch Example



Isometric Sketch Example



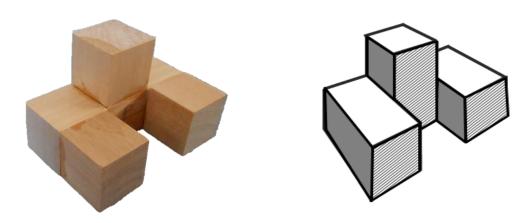
Isometric Sketch Historical Example

- Earl Silas Tupper (1907 - 1983) invented an airtight Tupper Seal in 1947
- Patent drawings of bowl and cover, 1957 (isometric pictorial)

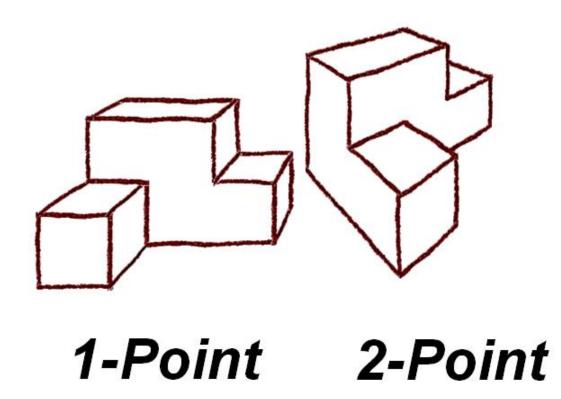
2,789,607 April 23, 1957 E. S. TUPPER Expiration: April 23, 1974 BOWL AND COVER 2 Sheets-Sheet 1 Filed March 17, 1955 EARL S. TUPPER INVENTOR. ASSIGNED AM. File # 220 Patent drawing of bowl and cover, 1957 Earl S. Tupper, Leominster, Massachusetts printed ink on paper Doodles, Drafts and Designs: Industrial Drawings from the Smithsonian

Perspective Drawings

A perspective drawing offers the most realistic three-dimensional view of all the pictorial methods, because it portrays the object in a manner that is most similar to how the human eye perceives the visual world.



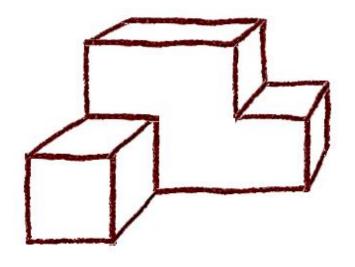
Perspective Drawings



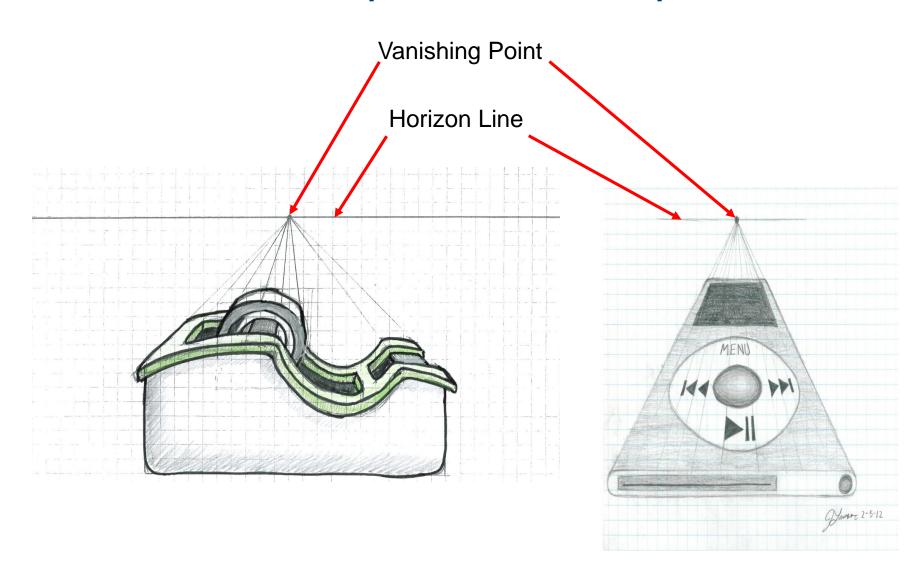
One-Point Perspective

The *one-point* perspective is relatively simple to make, but is somewhat awkward in appearance when compared to other types of pictorials.

- A horizontal line represents the horizon.
- One vanishing point is identified on the horizon line.
- A series of lines are drawn from distinctive points on the object to the vanishing point, outlining the object being constructed.



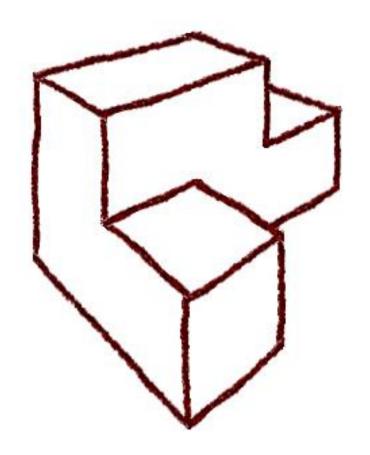
One-Point Perspective Example



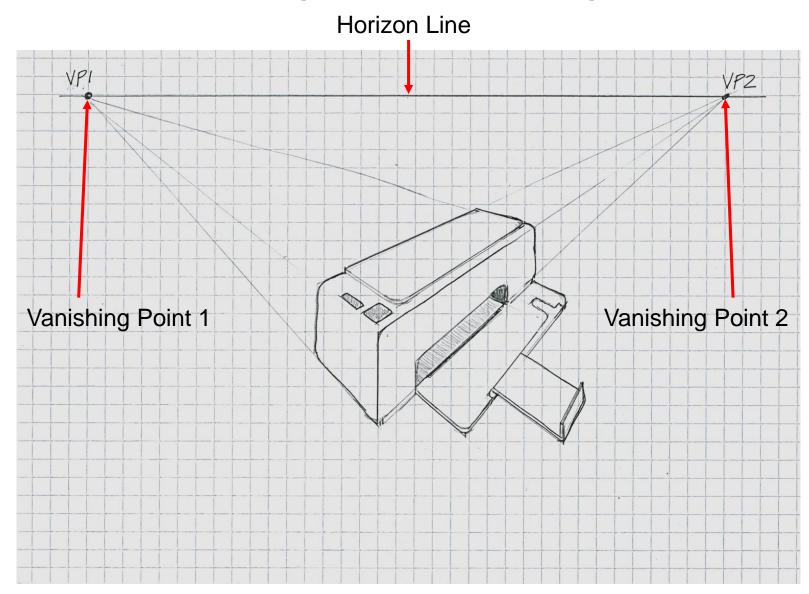
Two-Point Perspective

The *two-point* perspective is the most common perspective drawing.

 A step-by-step procedure will be explained for the perspective.



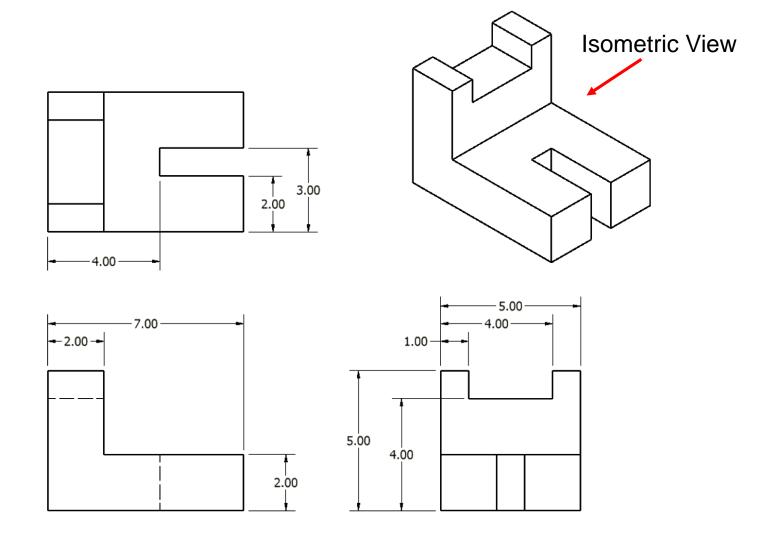
Two-Point Perspective Example



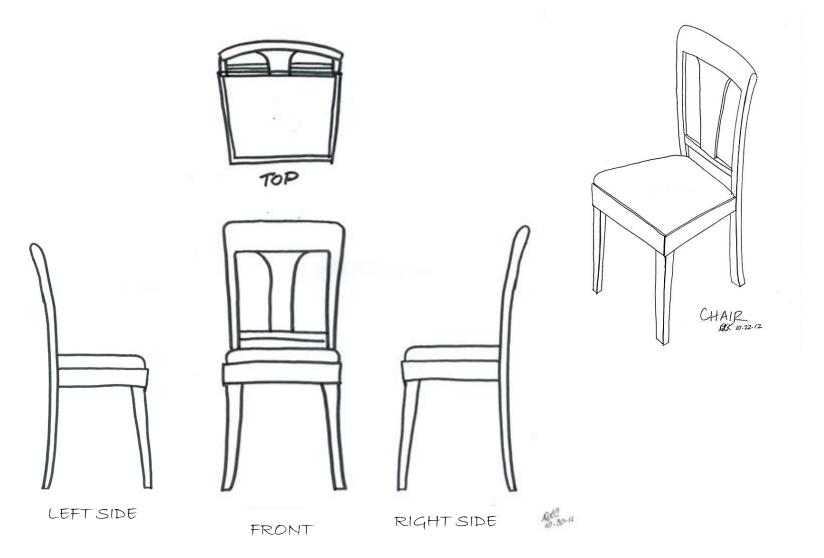
Multi-view (Orthographic) Drawing

- Shows two or more two-dimensional views of a three-dimensional object.
- Provides the shape description of an object.
- When combined with dimensions, serves as the main form of communication between designers and manufacturers.

Multi-view Drawing



Example of Multi-view Sketch



Dining Chair

References

Tupper, Earl Silas. Patent drawings, 1957. Smithsonian Institute: http://sil.si.edu.exhibitions/doodles