The Language of Drawing

Chapter 5:

Revolved Sections



Because the wheel has a raised edge, the top and front views will not show the detail necessary to build the part. Instead, we will use a sectional view to see the details inside the edge.



Above is the right side view of the wheel with dimensions. To the right, draw and dimension the right side and then add a section line that runs vertically through the center of the wheel. This will define your sectional view. You may need to alter the position of some of the dimensions from their placement in the picture to make room for the section line.



This is the sectional view of the wheel from the section line you drew on your sketch above. However, as you can see, the view only shows one of the three 1.4 radius holes. Because those holes are not aligned, it is impossible to use a normal section line to show more than one in a view.

There is a way to mend this problem: with a revolved section line.



Above is the right side view with a revolved section line. If we use this line, we can show both 1.4 radius holes in the same sectional view. with the revolved section line.



Draw and dimension the new sectional view below.