

In practice it is not necessary to draw the lines **AC**, **BC**, **AD**, **BD**, **CD**. Having found the points **C** and **D**, placing the ruler on these points, we may mark the point **E** in **AB**.

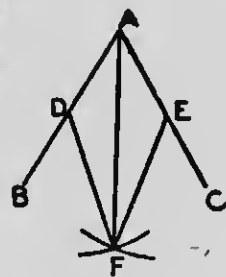
Subsequently, when the subject of parallel lines comes to be dealt with, another and possibly readier way of finding the middle point of a line will be given.

A number of exercises should now be given in bisecting lines of different lengths, the dividers being used in each case to determine whether the point reached is the middle point.

It is suggested that the pupil be given exercises in estimating with the eye the middle points of lines of various lengths, these points being afterwards accurately determined by geometrical construction.

2. To bisect an angle.

Let **BAC** be the angle. Place one of the points of the dividers or compasses at **A**, and mark off equal lengths **AD**, **AE** in **AB** and **AC**. With centres **D** and **E** describe portions of circles with equal radii, intersecting at **F**. Then drawing **AF**, the angle is bisected by it.



For, adjusting the bevel to either of the angles at **A**, it will be found equal to the other.

Or again, we would conclude that the angles at **A** are equal from the symmetry of the figure with respect to the line **AF**—the figure on one side of this line being just the same as the figure on the other side, but turned in the opposite direction.