THE CONSTRUCTION OF ANGLES.

To bisect a given angle. Let DAC be the given angle. With center A and any radius AE describe an arc cutting AC and AD at E and G. With the same radius and centers E and G, describe arcs intersecting at H, and join AH. The angle DAC is bisected—Fig 24.

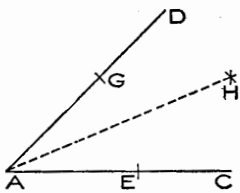

Fig. 24.

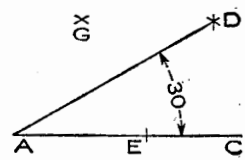

Fig. 25.

To construct an angle of 30°. With radius AE and with center A and E, describes arcs intersecting at G. With the same radius and with centers E and G, describe arcs intersecting at D, and join AD. The angle DAC contains 30°—Fig. 25.

To construct an angle of 60°. With radius AE, and with centers A and E, describe arcs intersecting at G, draw AD through G. The angle DAG contains 60°—Fig. 26.

To construct an angle of 45°. With radius AE and centers A and E, describe arcs intersecting at F, draw EG through F, and make FG equal to FE. Join GR, and with center R and radius AE make AH equal to

AE, with the same radius and with centers E and H describe arcs intersecting at L, draw AD through L. The angle DAC is 45°—Fig. 27.

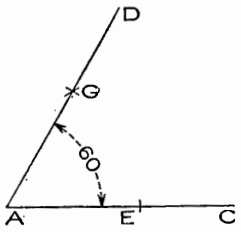

Fig. 26.

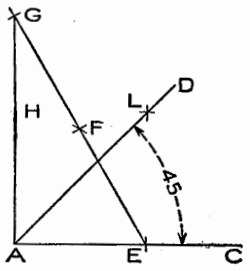

Fig. 27.

To construct an angle of 90°. With radius AE and centers A and E, describe arcs intersecting at F, with

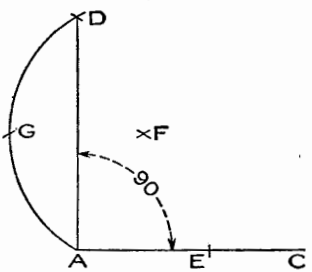

Fig. 28.

the same radius and center F describe the arc AGD, with radius AE, lay off AG and GD and join DA. The angle DAG is 90°—Fig. 28.