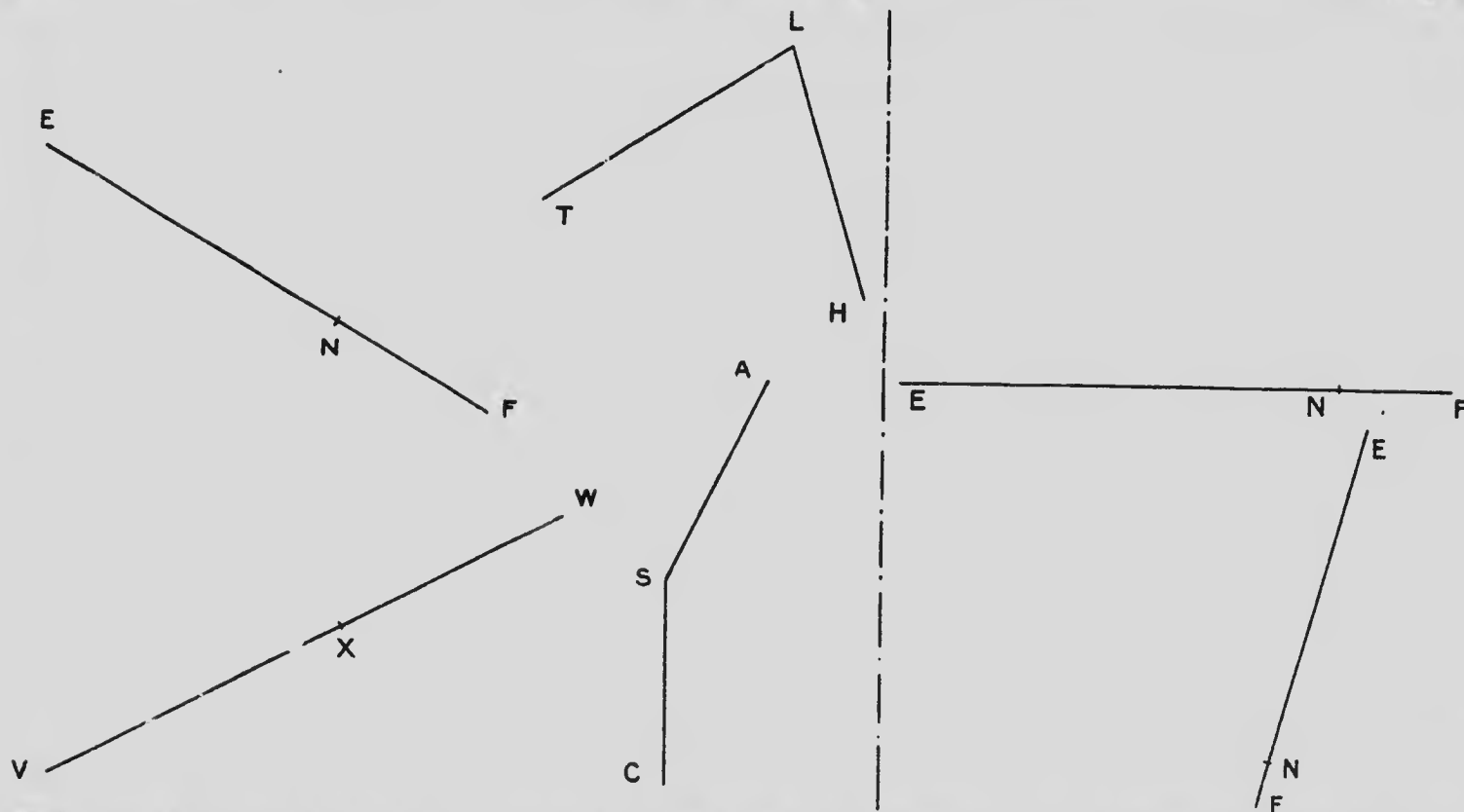




PROBLEM 3.—At a given point N in the given line EF, to make an angle equal to the given angle TLH.

1.—With centre L and any radius describe an arc KM.

2.—With centre N and the same radius describe an arc BR.

3.—With centre B and the distance KM cut off BD.

4.—From N draw a line through D; then the angle DNE will be equal to the given angle TLH.

NOTE.—When the given angle as ASC is very obtuse, accuracy is more easily obtained as follows:—Produce either side of the given angle as AS to Y, forming the acute angle CSY. At the point X in the given line VW make an angle VXP equal to CSY; then PXW will be equal to ASC.

PROBLEM 4.—To draw a perpendicular from a given point N, in a given straight line EF.

1.—From centre N, with any radius describe a long arc cutting EF in H. (Keep the same radius till the problem is finished.)

2.—From H cut the arc in L, and from L cut it again in T.

3.—From L and T describe arcs to intersect in K.

4.—A line from N through K will be perpendicular with EF.