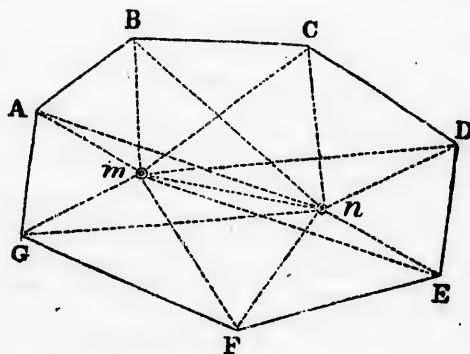


PROBLEM IX.

To survey any piece of land by two stations.

Choose two stations, from which all the corners of the ground can be seen, if possible; measure the distance between the stations; at each station take the angles formed by every object, from the station line, or distance. Then the station line, and these different angles being laid down from a regular scale, and the external points of intersection connected, the connecting lines will give the boundary.

The two stations may be taken within the bounds, in one of the sides, or without the bounds of the ground to be surveyed.



Let m and n be two stations, from which all the marks A, B, C, &c., can be seen, plant the instrument at m and by it, measure the angles $A m n$, $B m n$, $C m n$, &c. Next measure $m n$, and planting the instrument at n , measure the angles $A n m$, $B n m$, $C n m$, &c. These observations being planned the lines joining the points of external intersection, will give a true map of the ground. The method of finding the content will be shown further on.

The principal objects on the ground may be delineated on