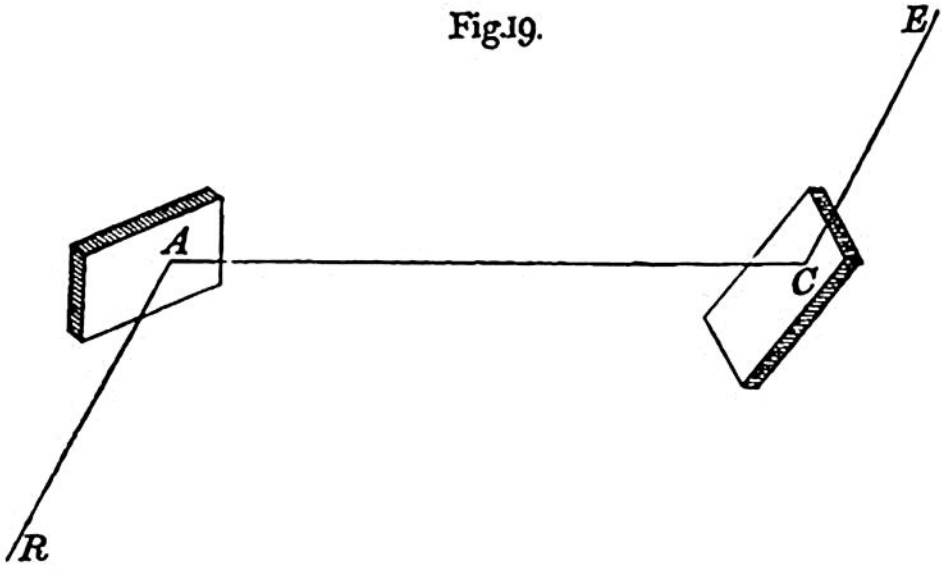
upper plate, at an angle of incidence of about 56°; a portion of the ray will be reflected, and will move in the direction *A E*; while another portion of the ray, *A B*, will pass through the bundle of glass plates onwards to *M*, according to the laws of reflection and refraction already stated. Now these two rays *A E*, and *B M*, possess remarkable properties, similar to one another in most respects, but directly opposed in another. Of these properties we shall endeavour to give a general idea.

If the ray of light *R A*, after falling upon the vertical glass *A*, Fig. 19, at an angle of incidence of 56°, be received on a plate of glass, *C*, placed

Fig.19.



at the same angle of incidence, and be then reflected from *C* to *E*; in the position intended to be shown in the figure, when the ray *R* is first reflected in a horizontal plane, *R A C*, and then in a vertical plane, *A C E*, the ray *C E* becomes so weak as to be scarcely visible, the