whole of it having passed through the glass *C*. But if the glass *C* be turned round 90°, (the ray *A C* being supposed to be the axis of motion,) so that the ray *C E* be reflected horizontally; instead of passing through the glass *C*, as before, the whole of the ray *C E* will be reflected. If we continue to turn the plate *C* upon the axis *A C*, round the entire circle, these alternations of transmission and reflection, will be found to take place in the same manner, at the two other quadrants 180°, and 270°. Hence the ray *R A*, by reflection, has acquired properties altogether new; it is said in short, to have acquired *polarity*, or to have become *polarized*. Now recurring to Fig. 18, the ray *R A*, in that figure, will of course follow the same laws as the ray *R A*, in Fig. 19; that is to say, the ray *A E* will have acquired polarity by reflection. Let us now consider what has happened to the refracted ray *B M*, in the same Fig. 18. This ray *B M* will also be found to be polarized; but if we receive it on a glass plate, *F G*, at the polarizing angle of 56°, we shall find that it will refuse to be reflected; whereas the reflected ray *A E*, does not refuse to be again reflected, unless the plate *F G* be turned round 90°; or into a plane at right angles to that plane in which the refracted ray *B M*, had refused to be reflected. Hence we conclude, that when a ray of light is incident at the polarizing angle, upon