

the "refractive index" of that medium be ascertained.

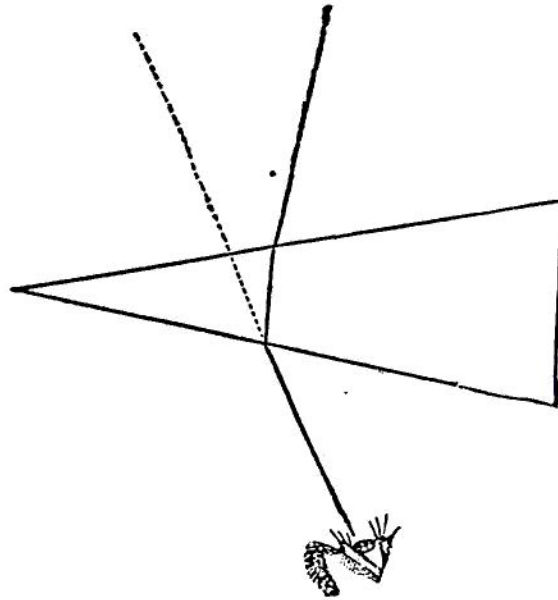


Fig. 2.

(29.) When refraction takes place out of *any one* transparent medium into *any other* in close and perfect contact with it—such contact as exists, for instance, between a fluid and a solid *that it wets*, or between two fluids of different specific gravities, which do not mix, resting the one on the other—experiment shows that, so far as *the mere direction* of the refracted ray is concerned, it is the same as if the two media were separated by an exceedingly thin film of air. In that case, the same perpendicular being common to both surfaces at the point of contact, the angle of refraction out of the first medium is the same with that of incidence on the second. And from this it results that the proportion of the sine of internal incidence on the surface of the first to that of