

(74.) In order, then, clearly to understand the nature of this phænomenon, it must be divested of this source of complexity, and studied in reference to light of one single colour or refrangibility—or, as it is called, “homogeneous” light, pure red or yellow, for instance. But before proceeding further, something more must be said of the whole class of phænomena referable to this head. And first, these colours are not dependent in any way on any colorific quality of the liquid of which the bubbles consist. Any sufficiently thin film, of any kind, suffices to produce them. They are seen in the oily scum on the surface of a stagnant pool. They are seen on the brilliant scales of old glass in stable windows, or on the wings of gaudy-coloured insects, or even on polished steel. Bubbles may be blown of a variety of liquids—nay, even of glass. However highly coloured, their intrinsic colour disappears when reduced to such extreme tenuity as is requisite for the purpose in question. But *all* exhibit *the same hues* in the same invariable order. Nay, more—it requires *no medium at all* to produce them, but only *an interval between two surfaces*. They are seen in the crack of a thick piece of glass which does not extend quite through its whole substance. They are seen when a piece of mica is partially split and one of the laminæ lifted up, following as a series of coloured lines the limit of the commencing fissure. It may be said that though no *solid or liquid medium* is here present, there is *air* between the divided surfaces. But under the exhausted receiver of an air-pump, there