coloured glasses, crystals, resins, and liquids—depend upon the greater or less facility with which the several coloured rays are transmitted through their substance. There is no medium known, not even air or the purest water, which allows all the coloured rays to pass through it with equal facility. Independent of the partial reflexion which takes place at the surfaces of entry and emergence, a portion greater or less according to the nature of the medium, is always stifled, or as it is called in optical language, "*absorbed*:" and this absorptive action is exerted unequally on the differently refrangible rays; so that when a beam of white light is incident on any such medium, it will be found at its emergence deficient in some one or more of the elements of colour, and will therefore have a tint complementary to that of the absorbed portion. Supposing, as is most probable in itself, and agrees with the general tenor of the facts, that an *equal per-centage* of the light of any specified colour which arrives at any depth within the medium is absorbed in traversing an equal *additional* thickness of it, the intensity of the coloured ray so circumstanced would diminish in geometrical, as the thickness traversed increases in arithmetical progression. The more absorbable any prismatic colour, then, the more quickly will it become so much reduced in proportion to the rest as to exercise no perceptible colorific action on the eye. And thus it is found that in looking through different thicknesses of one and the same coloured glass or liquid, the tint does not merely become *deeper and fuller*, but changes its character. Thus a solution of sap-green, or

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