tions is easily tested on any one ray of the spectrum insulated from the rest by intercepting all the others. The ray so insulated, whatever its tint, is no longer separated or "dispersed" by subsequent refraction into a new spectrum. It preserves its tint unaltered, and conforms to the "rule of the sines" in its flexure, as if no other colour or refrangibility existed. Hence we might be led to conclude, as Newton himself did, that between these two qualities—refrangibility and colour—an absolute and invariable connexion exists. This, however, is not the case. The propositions in question cannot be generalized. When different media are examined, we find that not only does the same colour correspond to different degrees of refrangibility, or to different *absolute* values of the refractive index in each, but that the same *change* of colour does not correspond in different media to the same *proportionate* change of the refractive index; and that, in short, taking the "scale of colour" in all its gradations, from red, through orange, yellow, green, blue, and indigo, to the least perceptible violet, and that feeble tint beyond the violet which can hardly be called a colour, but which is most nearly expressed by the term *lavender*, as a guide,—each particular medium distributes these rays through its spectrum, though always in the same *order* of succession, yet in other respects according to a law peculiar to itself: thus indicating both a total amount of *dispersion* and a *scale of action* dependent on the physical properties of the medium, and in some sort as it were personal to each. This power which a transparent medium has