ON LIGHT.

this, and all subsequent changes of direction and velocity, are held, on this theory, to be effected by attractive or repulsive powers resident in the bodies on which the light-corpuscules fall (or, which comes to the same thing, in the corpuscules themselves), and from which they are either reflected, if the repulsive powers be too strong to permit their penetration; or in which they are refracted, if they are able to enter and make their way among the particles of the refracting body. Colour, according to this theory, is accounted for by specific diversity among the luminous particles; and difference of refrangibility, by differences in the intrinsic energy of the acting forces as determined by the specific nature of the molecules, or, which comes to the same, by a difference of proportion between their moving force and their inertia. This is one of the many weak points of the theory. It runs counter to the only analogy which the observation of nature furnishes. It is as if the sun should be supposed to attract a planet of lead and one of cork with different accelerating forces; or as if, here on earth, a lump of platina and a lump of iron should be supposed to acquire different velocities in falling through the same It runs counter, too, to the original assumption, space. that when first emitted from a luminous body, in their passage through empty space, all the coloured particles move with equal velocities, and have therefore been equally accelerated by the emitting forces. That they do so, we know from astronomical observation. The Aberration of all the coloured rays is the same. Were it not so, every star seen through a highly magnifying telescope

269