ON LIGHT.

deposits, with every possible intermediate gradation of But if in all this series any particular size were size. found entirely and universally deficient, throughout the whole series of formations traceable to that source, we should conclude, not that a mass of that size is an impossibility in rerum naturâ, but that owing to some unknown cause in the nature of a previous sifting, every pebble or grain of that size had been already separated, or otherwise arrested in limine, and might expect elsewhere to find it in the case of some other series of geological formations. So it is with the sun's light. Certain definite and marked degrees of refrangibility are wanting in its spectrum, indicated by the dark lines But if absent in solar light, they exist in which cross it. the light of flames, and of other luminous sources, which in their turn are again deficient in other degrees which yet abound in the solar rays. Refrangibility, then, taken as a property of light generally, is a quality susceptible of indefinite gradation, from the one extreme of the spectrum to the other.

(35.) If we limit our consideration to some one medium—glass, for instance—we find each particular degree of refrangibility associated, first, with a determinate and invariable index of refraction, which determines its place in the spectrum by determining the amount of deflexion it shall undergo in passing through the prism; and, secondly, with an equally determinate and invariable tint in the scale of " prismatic colour," the red corresponding to the least and the violet to the greatest refractive index. The truth of these proposi-

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