## ON LIGHT.

their images permanently on surfaces duly prepared to receive them). Is there any physical mode of conveyance by which, reasoning from what we see in cases which we are able to analyze, we can imagine either a material agent to be bodily transported, or a movement propagated, or an influence wafted, from place to place, so as to render a rational and consistent account of the phænomena of light, or so at least as, generalized, and (so to speak) sublimated in modes not inconsistent with the known properties of matter, to do so ?

(8.) One feature is common to all ordinary physical modes of communication. The transmission from place to place, be it of what it may-of a letter by post, 'a gunshot, a sound, a wave, a tremor, or a shock even of . an earthquake-occupies time. It has a velocity : sometimes a very great, but anyhow a measurable one. Ts this the case with light? The answer, from all ordinary experience, would be in the negative. But this is only because the velocity in question is so great that the longest distances to which we can send a flash of light and receive it back again by reflexion is traversed in an interval of time too short to be perceived as an interval, so that the reflexion appears to be simultaneous with the It is otherwise when we bring to bear on direct flash. the question the ingenious combinations and delicate appliances of modern science. The telescope enables us to become eye-witnesses in the way of astronomical observation of events which take place at distances in space almost inconceivably greater than any we can measure here on earth; at times calculable beforehand.

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