ON LIGHT.

laying on of successive washes of *different* transparent colours, the tendency is to produce, first, a tint very remote from that *expected* to result from their union; and secondly, becoming more and more muddy and sombre, the greater the number of such heterogeneous layers of colour. Hence the maxim in water-colour painting, to secure brilliancy by using only a single wash of colour, if possible, to produce the required effect. The painter should never forget that his notion of colour (as compared with that of the photologist) is *a negative one*. He operates solely by the *destruction* of light, and his aim should always be to destroy as little as possible. His direct action (unknown to himself) is upon the tint complementary to that which he aims at producing.

(49.) Each particular coloured medium has its own peculiar and specific scale of absorptive action, differing inter se in the most singular and capricious manner. In many, indeed in most cases, the spectrum viewed through such a thickness as to give a strong colour to common daylight, in place of being seen as a continuous band of graduating colour, is broken up into distinct coloured spaces, more or less intense, and more or less welldefined, separated by dark intervals. This is particularly the case with coloured gases or vapours. Thus the red vapour of nitrous gas, especially when its absorptive action is intensified by heat, breaks up the spectrum into a succession of narrow spaces, alternately dark and bright, from one end to the other.

(50.) When coloured flames are examined with such a "spectroscope" as above described, the phænomena are

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