

relation to each other of these complementary colours is curiously and strikingly illustrated by the spontaneous production within the eye itself of the tint complementary to any vivid colour, which takes place when, after gazing steadfastly on an area so coloured, on a white ground, and strongly illuminated, the gaze is suddenly transferred to a uniformly white surface. There is seen on it, though only for a few moments, a picture or optical image of an area similar in form and size, but tinted with the complementary hue, which fades quickly away. This curious and beautiful experiment, which requires no apparatus to exhibit, and which any one may try in a moment, is exceedingly illustrative of the mode in which the *sensation* of colour is produced. It proves that, in the nervous tissue which receives and feels the picture within the eye, there are nerves individually and exclusively sensitive to each of the coloured rays, or at all events to each of those primary colours (if such there be) by whose mixture all colours are compounded. When white light falls on a portion of the retina wholly or partially deadened or fatigued by the excitement of the nerves appropriate to one set of rays, the sensibility of the others being left unexhausted ; that other portion will be for a time proportionably more sensitive to the remaining rays : so that under the stimulus of white light an undue preponderance is temporarily given to their influence, and the sensation of the complementary tint is conveyed to the mind. This is only one of innumerable instances of the wonderful adaptation of that most astonishing organ to the performance of its office of con-