

theory can be only applied to one class of phenomena, and does not at all aid us in explaining the colours of fluids and transparent solids. In some instances colour is produced by the peculiar property which the bodies have of stifling or absorbing rays of a certain colour, while they suffer the passage of others without exerting any detaining influence upon them. But whether colour be produced during the process of reflection or refraction, the result being in some cases dependant on the one, and in some on the other, we cannot but admire the great variety of appearances that are produced by comparatively simple means. The ever-varying tints of leaves and of flowers, of feathers and of furs, might well be supposed to result from a complication of causes almost beyond the reach of human ingenuity to discover, and yet we may account for all that we see when we know the principles of reflection, refraction, and absorption. Water and air, in small quantities, are white, because they absorb all the rays equally, and yet transmit a large portion of each; coal is black, because it absorbs and stifles all the rays that impinge upon it. If the infinite variety of colour which we observe in nature did not exist, then all the forms, however beautiful, which decorate the earth, would lose their charm, and the eye would ever rest upon a dull monotonous scene, incapable of exciting a single feeling of interest.

COLOUR OF THE CLOUDS.

There is as much beauty of colouring in aerial as in terrestrial scenery. It is scarcely possible to trace the successions of colour in clouds, whether in the light and resplendent hues of the evening cloud, or in the deep and sombre tints of the threatening nimbus. These varied appearances are produced by the absorption, refraction, and reflection of light.

Light, in its passage through the atmosphere, is in part absorbed, and the amount transmitted is in some degree governed by the density of the medium through which it passes; and hence it follows, that when the rays of light impinge upon a thick cloud, they are but feebly transmitted. It must have been observed that the edges of clouds are generally much more luminous than their centres, which may be traced to the thinning of the body of vapour at its edges, so that we may determine the density of a cloud by its colour.