

and so on; they would be found after projection all indeed lying in a line, but that line an interrupted one—consisting first of shot occupying a certain length; then an interval; then wheaten grains to a certain extent—another interval—then sand, chaff, and so on. Now this is by no means an inapt though a coarse representation of the constitution of the Prismatic Spectrum. When it is formed by an extremely pure prism, and with certain precautions (which need not here be detailed) to ensure the perfect purity of its colours, it is found to be *discontinuous*: that is to say, not a simple streak like a riband of paper coloured from end to end by tints graduating insensibly from red to violet, but like such a riband marked, *across its* breadth, by perfectly black lines of exceeding delicacy, yet some wider some narrower than others; and where these lines are, the paper is not illuminated at all. Into these spaces (for narrow as they are, they have each a certain breadth) none of the light dispersed by the prism falls. These lines, be it also observed, are not occasional or accidental, but permanent; and belong to the sun's light *as such*. They divide the spectrum into compartments as the boundary lines between counties on a map divide the soil into regions; and each individual of these compartments differs in *other qualities besides colour* from its neighbours on either side; much as contiguous regions of a country differ in soil and cultivation as well as in climate. It is as if our assorted grains were distinguished not only by being coloured according to their respective sizes, but each particular size and weight distinguished.