(45.) The analysis into its prismatic elements of the colour of any natural object, is readily performed by examining through the refracting angle of a prism of perfectly colourless glass a rectilinear band or strip of the colour to be analysed, so narrow as to have scarcely any apparent breadth, and to appear as little more than a coloured line. Placing this on a perfectly black ground, parallel to the refracting edge of the prism, and illuminating it as strongly as possible, it will be seen dilated into a spectrum, or broad riband of colour, exhibiting of course those coloured rays only which belong to the composition of the tint examined. An exceedingly convenient arrangement for this purpose is to fasten across one end of a hollow square tube of metal or pasteboard blackened within, of about an inch square and twelve or fourteen inches long, a metal plate having in it a very narrow slit parallel to one side, quite straight, and very cleanly and sharply cut. At the other end within the tube is to be fixed a small prism of highly dispersive colourless flint glass, having its refracting angle parallel to the slit, and so placed that when the tube is directed to the sky, or rather to a white cloud, the slit shall be seen dilated into a clear and distinct prismatic spectrum. In this of course all the prismatic colours will be seen in their due order. But if, instead of this, any coloured object—as the leaf of a flower, for instance, or a coloured paper, strongly illuminated by direct sunshine (if necessary, concentred on it by a lens, so, however, as not to *scorch* the object by the heat of its focus),—be placed so near to the slit as completely to