

ray that falls upon the retina, and the line in which it comes to the eye. But the ray which is here spoken of strikes a mere point of the retina: this point can have no direction; the obliquity of the incidence of the ray can inform us of nothing: rays of all degrees of obliquity are converging to form that point; and do not the same mathematicians give us, in the first lessons of their science, as the definition of a line—that which is drawn through two points at the least? Where are the two points here to indicate the direction of the line,—since the cornea, or the humours of the eye,\* are not sensible to the passage of the ray? Or is this an error which has crept in from inaccurate conceptions of the anatomy? Has the idea that the direction of the ray can afford this knowledge, arisen from the notion that the ray passes through the thick and turbid matter of the retina? I would ask for what reason is the “finder” attached to the great telescope? is it not because the larger instrument, from magnifying one object in a high degree, cannot be directed in the heavens—the observer seeing with it nothing but that one object? Accordingly, to remedy this there is mounted on the greater telescope a smaller one exactly parallel, of lesser power, but commanding a wider field;

\* See a paper by Mr. Alexander Shaw, who has explained this subject very happily.—*Journal of the Royal Institution*, 1832.