light and colours result from vibrations which vary "from four hundred and fifty-eight mil"lions of millions, to seven hundred and twenty"seven millions of millions in a second," when
I find that a fine needle pricking the retina will
produce brilliant light, and that the pressure
of the finger on the ball of the eye will give rise
to all the colours of the rainbow!

There is a condition of the percipient or sentient principle, of the brain and nerves, as well as of the organ of sense, conforming to the impression to be made; a condition which corresponds with the qualities of matter. The organs of sense may be compared to so many instruments, which the philosopher applies to distinguish the several qualities of the body which he investigates. The different properties of that body are not communicable through any one instrument; and so in the use of the senses, each organ is provided for receiving a particular influence, and no other.

However mortifying it may be to acknowledge ignorance, variation of motion in a body cannot be admitted as the cause of sensation universally; nor, as I said, can we comprehend anything of the manner in which the nerves are affected; certainly we know nothing of the manner in which sensation is propagated or the mind ultimately influenced. But there is a very pleasing view of the subject, notwithstanding;—which is to