

in all those philosophical experiments which are carried on under what is called the exhausted receiver.

But the most important result of the transparency of glass is the modification which light undergoes in its passage through lenticular masses of that material. When, for instance, in consequence of disease or advancing age, the eye no longer retains the power of discerning objects distinctly, how much of hourly comfort, as well as of intellectual enjoyment, would be lost, were we not able to supply the natural defect by the artificial aid of glasses of the requisite form and density. And, again, how many important facts in the physiology of animals and vegetables, as also in the constitution of inanimate bodies, would have remained for ever undiscovered, but for the aid of the microscope; the magnifying powers of which depend on the transparency, and form, and the right adjustment of those pieces of glass through which the objects subjected to observation are viewed?

And, lastly, how shall we estimate the value of those discoveries, to say nothing of the constantly accumulating mass of observations connected with them, which the world owes to that wonderful instrument the telescope? By the aid of which not only has the knowledge of our own sidereal system been extended, in consequence of the discovery of new planets belonging to it;