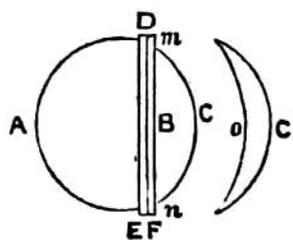


always expecting from America the eyes of the remarkable varieties which occur there, and which have been repeatedly promised me by American naturalists.

As you will take a great interest in the subject, I shall endeavour to give you some idea of what I have done.

Independent of the peculiarity which you have noticed, of there being no aqueous chamber between the *cornea* and the *lens*, there is no *iris* and no *pupil*, the quantity of light admitted being regulated by the *eyelids*.

The lens itself is of a most singular description. It consists of *two lenses* sticking together, and capable of being separated without injuring either. This structure is unique.



The lens D A E C consists of two, D A E, and a meniscus, *m C n*, which is kept close to D A C by a double cartilaginous ring, D E. The dimensions are D E = 0.51 inch, A C = 0.433 inch, A B = 0.3433 inch, B C = 0.09 inch; *m n* = 0.333 inch. The outer diameter of the front ring, D F, is = 0.59 inch, and its inner diameter = 0.31 inch.

In some indurated lenses I find the lens C to be *doubly convex*, and the surface of the lines D E A, on which it rests, concave. This must have been the lens of a different species.

The fibrous structure of the lens is very remarkable. The laminae, or coats, of the lens are parallel to D A E and *m C n*; and the fibres of the lens D A E diverge from A as a pole, like the meridians of a globe; and they all terminate, not in another pole, but *in the surface* D E, or that which corresponds with *m o n*. This termination of the whole component fibres of the lens D A E in a surface is quite *unique*, and the mode of converting this rough plane (like a shaving-brush cut across), into a smooth surface, is singularly beautiful. Each elementary coat, or lamina, being composed of fibres, has at its termination in the periphery