

which it may be separated from its capsule when that membrane is opened. These reasons are far from being satisfactory; it does not necessarily follow that parts do not contain vessels, because we cannot inject them; we frequently fail when there can be no doubt of their existence, especially when they do not carry red blood. I have not myself succeeded in injecting the vessels of the lens, but I have not repeated the trial so often as to make me despair of accomplishing it; more especially as Albinus, an anatomist whose accuracy is universally acknowledged, asserts, that after a successful injection of the capsule of the lens, he could see a vessel passing into the centre of the lens itself. Lobe, who was his pupil, bears testimony to this. The assertion, that the lens is not connected with its capsule, I think I can show to be incorrect; it has been made from want of care in pursuing the investigation, and from a notion that a fluid exists throughout between the lens and its capsule. When the capsule is opened, its elasticity causes it to separate from the lens; especially if the eye be examined some days after death, or has been kept in water, as then the lens swells, and often even bursts the capsule and protrudes through the opening, by which the connexion is destroyed. I have however satisfied myself that the lens is connected with its capsule (and that connexion by no means slight) by the following method. I remove the cornea and iris from an eye, within a few hours after death, and place it in water; then with a pair of sharp pointed scissors I divide the capsule all round at the circumference of the lens, taking care that the division is made behind the anterior convexity, so that the lens cannot be retained by any portion of the capsule supporting it in front. I next invert the eye, holding it by the optic nerve, when I find that the lens cannot be displaced by agitation, if the eye be sufficiently fresh. In the eye of a young man, about six hours dead, I found that, on pushing a cataract needle into the lens, after the anterior part of the capsule had been removed, I could raise the eye from the bottom of the vessel, and even half way out of the water, by the connexion between the lens and its capsule. It afterwards required considerable force to separate them, by passing

the needle beneath the lens, and raising it from its situation. I believe those who have been in the habit of performing the operation of extraction, have occasionally encountered considerable difficulty in detaching the lens from its situation after the capsule had been freely opened; this difficulty I consider fairly referable to the natural connexion just noticed."

"Now I cannot agree with Mr. Walker that inflammation of the lens and its capsule, is solely the result of extension of inflammatory action of other textures; I grant that such is very frequently the case, but reasoning from analogy, and when we remember that these parts are as well supplied with vessels, nerves, &c., as other parts, I conceive that the lens and its capsule may be the primary seat of the inflammation. Nor do I at all agree with Mr. Walker, when he says that the result of *every* morbid change that takes place in these parts, must of necessity be followed by cataract, unless he would call that opacity a cataract which disappears on the subsidence of inflammatory action; there indeed his idea would be correct; but it does not appear that he means any such thing. I conceive every case of cataract, whether capsular or lenticular, even those cases which occur in old age, to be the result of inflammatory action, with the exception of those which occur suddenly, whether produced by blows or otherwise. There can be no doubt but that in some instances there is diminished vitality of the part, yet this very state must be considered as the result of chronic inflammation; but if cataract were alone dependent upon diminished vitality, we should first have opacity of the hyaloid membrane and vitreous humour, and of the membrane of the aqueous humour, for their vital organization is much less than that of the lens and its capsule. But a question worthy of consideration is, why do the lens and its capsule generally remain opaque, and even very often increase in opacity, after the inflammatory action has been subdued? I attribute this to the power of the absorbents having been diminished by the severity of the previous inflammation. But it may be argued that pain is one of the symptoms of inflammation, and that in the formation of cataract there is none. It