The third class comprises astigmatism.

Hyperopia is nearly always congenital, and nearly all eyes are hyperopic at birth. The eyeball increases in length with the development of the rest of the body, and hyperopia diminishes with emmetropia, or more rarely into myopia.

Myopia is that form of ametropia in which the retina lies back of the principal focus of the eye, and only those rays from some points nearer than infinity can come to a focus upon the retina. This is the far point of the myopic eye.

Myopia may be produced by increased refraction of the cornea or crystalline lens, curvature myopia, or by too great a length of the optic axis, axial myopia.

In many cases myopia is due to elongation of the optic axis, the result of pathological changes in the coats of the eye.

Myopia is frequently progressive, and the increased convergence rendered necessary by the near position of the far point is a significant factor in the production of myopia on account of the distension backwards, which results from the compression of the ball between the external and internal rectus muscles.

Myopia does not usually decrease with age, but, on the contrary, tends to increase up to adult life or later.

The term astigmatism is applied to that refractive condition of the eye in which a luminous point forms an image upon the retina, the shape of which image is a line, an oval, or a circle, according to the situation of the retina; but never a point, that is, the object is never accurately focussed. Hence there is a circle of diffusion.

In regular astigmatism there are simple hyperopic and myopic astigmatism, compound hyperopic and myopic astigmatism, and mixed astigmatism, *i.e.*, hyperopia and myopia combined.

Simple astigmatism means that one meridian of the cornea is normal and the other hyperopic or myopic. The normal meridian for the hyperopic is the vertical, and for the myopic is the horizontal.

Compound hyperopic or compound myopic astigmatism is that a plus or minus spherical is needed for both meridians; but that, in addition, one meridian is stronger than the other, and hence a + or — cylinder has to be added in order accurately to focus an object upon the retina.

Mixed astigmatism means that one meridian is hyperopic and the other myopic.

Simple astigmatism of a small amount, or a small grade of