

a part whose function is rarely utilized dwindles away, and in time may even disappear.

The one advantage possessed by the moderately short-sighted man is that when he falls into the "sere and yellow" he is not obliged to wear glasses for reading. Such persons often pride themselves upon this, and never cease to talk about it. They even hand it down as a legacy to their children, and one hears echoes of it when he is informed that "grandma at seventy" never needed glasses when reading or sewing. The fact that the old lady could not differentiate between a cow and a horse at a hundred feet was left out of the story.

There is another form of optical defect, due to a malformation of the eye, called *astigmatism*. Not only should the eyeball be neither too long nor too short from before backward, but it should be of the normal *shape*. When it is not, when the watch glass of the cornea is wider from side to side than it is from above downward, or *vice versa*, the rays of light become mixed, as it were, and the blurred image also results. The unfortunate ciliary muscle still tries to neutralize this burdensome defect, pulls on a few "guy ropes" here, and lets out a few there, and does its best to focus the picture aright, and so long as the astigmatic person is young and in good health, often succeeds pretty well; but some day too much application to study, or too frequent reading by an improper light, or an acute illness furnishes the last straw that breaks the muscular back, and then headaches, eye-aches, blurred vision and a host of other symptoms may result. Properly fitting cylindrical glasses—plane in one part and convex or concave in another—must be used to correct such an error.

In the vast majority of cases infants are born hypermetropic, and as they grow older the eyeballs enlarge a little, so that they become emmetropic or retain a slight degree of the original hyperopia. If the enlargement of the ball, through overstudy, constant close work, etc., goes on, the individual becomes myopic, and the eye may be the subject of disease. Astigmatism is nearly always congenital.

That the human animal has two eyes must not be forgotten. Vision with both eyes together—*binocular* vision—is a much more important and useful thing than monocular sight, and to obtain it we must have not only two fairly good eyes, but they must be directed toward the object to be seen in much the same way. The image of this object must fall upon corresponding points of both