objects is at once obtained. The accidental use of their grand-mother's glasses to aid the crystalline lens to focus a sharply defined image is a marvellous revelation to such an eye, and shows just what it requires to make it a strong, useful organ, viz., a pair of properly adjusted magnifying spectacles. With such scientific aid the child is in condition to undertake hard study, and seeing clearly becomes easy. Because over-exertion of the eye-muscles is no longer required, when the child wears properly selected glasses, no more pain in eyes and head is experienced during study hours.

Although rest from near work will always bring about relief from the pain consequent to over muscular exertion, the advice so often given to parents by the family physician, to take hyperopic children from school, and let them rest their eyes from study, for months at a time, is bad, because it is founded on ignorance of the cause producing the trouble. At the end of six or twelve months, the eye is just as mis-shaped as it was before the rest was taken, and application for near work will surely bring the former painful discomfort. This is a matter of every day observation. Adjust proper glasses, correct the error of refraction, give the eye muscles less work to do by allowing the eye to do its work with spectacles on, and consequently without effort, is surely the rational course to be pursued. With the aid of magnifying glasses for all uses a flat eye will need no rest. To rest such eyes with the expectation that they will become strong is delusive, and is, therefore, bad advice.

Again, an eye may be mis-shaped from the round standard by being longer than it ought to be. An eye long in its antero-posterior diameter is more oval than round, and is called near-sighted, or myopic, because it only sees near objects clearly. The retina is so far from the lens in long eyes that a focus of light from distant objects is made before the retinal screen is reached. When the picture is finally thrown upon the nerve layer, it is ill-defined and consequently blurred. Distant objects for such eyes are always befogged, unless the strength of the crystalline lens is weakened, and its focus lengthened by the use of concave or near-sighted glasses. As flat eyes were always congenital, so long eyes may be found at birth. As a rule, however, eyes acquire this condition, and become mis-shaped by too much study in early school life. When an eye, previously good for seeing distant objects, changes shape and becomes nearsighted, the change indicates a yielding of the sclerotic or outer tough coat, which is the sustaining wall of the eye-ball. This is a weakening and diseased condition of the organ, which will eventually be a serious injury if it becomes excessive.

When progressive near-sightedness is found in school children, in order to check the rapid deterioration in this very valuable organ, rest from eye-work becomes a very important factor in the treatment. When the eye-ball is elongated, the cornea retaining its regular outlines, concave spherical glasses correct the defect in the focusing power of the lens and make vision better; but this aid for distant vision does not make such young and still growing eyes strong or capable of standing abusive work.

There is still a very important class of mis-shaped eyes, also starting usually with the beginning of life. It is to call attention to the headaches and eye pains caused by many such eyes that this paper is written. In this large class of painful eyes the cause of trouble lies in irregularities of curvature of the surface of the cornea. The curvatures of the various meridians differ, as if the eye-ball had been flattened from its sides. In such eyes the mis-shaped cornea may be represented by the crystal of a watch, which has lost its true spherical form, from irregular pressure upon its edges when the substance of the glass was still soft. The curvatures of the short diameter, corresponding to the direction of pressure, must be greater than those of the longer ones, and this must necessarily vary the focus of light passing through these different convex surfaces. In some meridians light may pass through and focus correctly upon the retina; in other directions the focus of transmitted light will be made too rapidly or too tardily, in either case blurring the retinal image, and causing defective vision. Whether the cornea border be compressed vertically, horizontally, or obliquely it so changes the surfaces of the cornea for that direction, that however perfectly the other surfaces of the cornea may focus, the faulty curvature acts as if it were a distinct lens of different focal power, and it will cast shadows over the sharply defined picture made by the correct portions of the cornea. This error of refraction is called astigmatism, and may be found in long, short, or round eyes; hence we find simple or mixed, hyperopic or myopic astigmatism. Such irregular corneas are frequently met with.

In all such eyes an effort is made automatically to correct this fault by changing the shape of the crystalline lens to correspond with the irregularities in the cornea. Fortunately the lens in young persons is so soft and jelly-like, that very little action on the part of the eye muscles corrects the faulty lines of refraction, and a perfect focus is secured. For a time this succeeds well, and comfortable, clear vision is enjoyed, provided the application of the eyes for near work is not too long continued. But unfortunately the lens is hardening steadily with advancing age, and the muscular effort has to be continually increased till it becomes irksome and finally painful. The discomfort produced does not restrict itself to the eyes alone, but diffuses itself over the brow, forehead, and temples, causing headache more or less persistent. In some cases the pain invades the whole head, back of neck, and even spine. Those headaches can always be brought on by eye-use. To some very sensitive astigmatic patients eye-use refers to their whole waking life. They arise in the morning