

THE CARE OF OUR EYESIGHT.

BY A FAMILY DOCTOR.



THE indifference with which many people regard even serious affections of their eyes is truly remarkable. Slight troubles are neglected, and often it is only when the mischief is irremediable that medical advice is sought. Yet the sense of sight is essential to our independence, and our usefulness, and our enjoyment. At the same time, it is our chief defence against most of the dangers which threaten us in our daily life.

The eye is an extremely sensitive organ, and responds readily to the faintest shadow, so that the lids close as if instinctively. The eyeball is thus protected from direct injury, for "coming events cast their shadows before." It is shielded from dust by the eyelashes, and kept moist and clean by the secretion of the lachrymal gland. From excessive light it is shaded by the automatic action of the iris, which enlarges or diminishes the round opening known as the pupil (through which alone light can enter the eye), according as the light is dim or intense. From violence it is protected by its deep situation, and by the strong masses of bone which surround it.

The eyeball itself is an elastic bag filled with fluid, and resting at the back on a layer of soft fat, so that, even if struck, the force of the blow is broken, and comparatively rarely is the eyeball torn. Within the eye is a convex lens, the curvature of which is changed by muscular action when we look at near objects. By means of this lens an image of the objects in the world around us is thrown on the retina, which is chiefly composed of nervous elements, and is placed at the posterior part of the eye.

I mentioned in a previous paper that thirty per cent. of the blindness in the United Kingdom depends upon neglect of the eyes in infancy. The newly-born baby is especially liable to inflammation of the eyes. In every case this is wholly preventable by carefully washing the eyes immediately after birth, and by subsequent scrupulous attention to cleanliness. But even if inflammation occurs, it may be easily and certainly cured, in the vast majority of cases, by suitable and immediate treatment. If neglected, it tends to become aggravated, and destruction of the transparent cornea results. I would emphasise the importance of educating mothers and nurses in a few details of personal hygiene and of the care of children.

It is to another class of cases, however, that I wish to direct attention at present. It is generally known that too early attendance at school pre-disposes to the impairment of sight. Thus near sight is very generally developed. Most children at the age of five have normal vision—some are far-sighted, a few are near-sighted; but as the children become older the

number of those who are near-sighted is greatly increased, while the number of far-sighted children is diminished, so that the final result is a diminution in the number of children with normal vision. Several causes have been assigned for this change. Of necessity, heredity is one cause; for short sight is extremely liable to be transmitted; and we can all call to mind instances of families being so affected. It seems to be more frequent among highly civilised nations; and Germans are notoriously affected. It is also stated that near sight is more frequent in cities than in the country; for in the city it is not possible to use the eye for far distances, and it is therefore insufficiently exercised. Sailors, who are always observing distant objects, are rarely, if ever, short-sighted. A bad light is a proved and frequent cause of near sight. Our rooms should be well lighted, but the light should not dazzle the eyes. When we read, it is best for the light to fall over the left shoulder; it is injurious if it comes from the front. It should be steady, and any flickering, such as is usually seen in candle-flames, and occasionally in bad gas-burners, is very trying. A bad position of the body while reading favours the development of near sight. The page ought to be nearly perpendicular to the line of sight, and should be held about fifteen inches from the eye; the body should be kept as upright as possible while reading or writing, and not—as is so often the case—held down over the page. Lying down while reading is injurious. Reading in bed by the light of a candle is especially to be condemned. Another cause of near sight is the persistent disregard of hygienic requirements—studying in ill-ventilated rooms, in overheated or cold rooms, want of outdoor exercise. Closely associated with the last-mentioned cause is ill-health of every kind, more especially gastric derangements. Lastly, over-fatigue of the eyes, reading very fine print, sewing by twilight, or using the eyes when they are aching from gazing at fire-light or snow, may also induce short sight.

Short sight is a frequent source of headache in children, and often causes them to be considered dull and stupid. It causes them to blink, and even at times to squint. It is well known that the eye is focussed to see objects at different distances by changes in the curvature of the lens; this is technically known as accommodation. The muscles by which this is effected are contracted when the eye is focussed for near objects, and simultaneous changes in the size of the pupil occur; it becomes contracted during near vision, and this association is invariably observed, except in certain organic diseases of the brain. When the muscles have to contract more than they are intended to do, they seek help from the muscles of the eyeball, and so a squint is developed. The far sight, which frequently occurs with advancing years, is due to a change in the elasticity of the lens. Near sight may be explained by the too-shortness of the eye from back to

front, so that the two defects are not due to any similar causes. A third defect of refraction is known as "astigmatism." In this case the eye cannot focus at the same time two lines at right angles to one another; for instance, it cannot see all the sails of a windmill at the same time. Headache and aching of the eyes are the main symptoms.

It is comparatively easy to compensate for these errors by means of spectacles; but we frequently see people—especially middle-aged people—striving to avoid the use of them. This, perhaps, is due to a feeling that it involves a confession of infirmity and approaching decay; and so they endure discomfort and strain their eyes over work and reading in a manner painful to see. It is always better to recognise the inevitable, because when suitable glasses have been obtained the process of degeneration becomes practically stopped, while in the other case the strain on the eyes very rapidly intensifies the evil.

The general adoption of the pince-nez is not to be commended; for the glasses are not kept parallel to the eyes, and the spring pinches the nose so as even to leave permanent marks in some cases. It is always wiser to consult an oculist than to accept from an optician a pair of glasses on your own responsibility. Wrong glasses do more harm than good; and though the initial cost may be greater by consulting an oculist, the ease and comfort obtained is incomparably greater, and well repays the increased outlay.

Everybody should know how to deal with such a simple matter as the extraction of foreign particles from the eye. It is rare for one to make a railway journey of any length without seeing somebody get a particle of grit or cinder in his eye; and unless this is carefully and promptly removed, a great deal of suffering is caused, and the eye may even be disabled

for a time, owing to the inflammation which is caused. The best thing for removing these particles is a camel-hair brush. If this be not at hand, a silk handkerchief, or even a soft fine linen one, will serve, a corner of it being rolled up to form a point. On no account should such a thing as the point of a pen-knife or other similar instrument be used. Many people do use these; but even when they remove the particle from the eye they are liable to cause great and injurious irritation.

The first thing to do is to ascertain which eyelid the particle lies under—supposing that it is not visible. That eyelid should then be drawn back by means of the eyelashes until the particle is seen, when it is carefully removed by the brush, or whatever is used. If it be necessary to look under the upper eyelid, a good plan is to lay a round body, such as a lead pencil, over the upper part of the lid, and then draw the eyelid over it, by means of the eyelashes.

When there is great pain, it is difficult to manipulate the eye. On this account it is usual to apply a little cocaine, which for the time deadens all feeling. This, however, should only be done by somebody familiar with such drugs.

Children may often be seen rubbing their eyes. This should not be allowed, as it is a bad habit, and if persisted in may injure the eye to some extent. It may be done in consequence of the eyes smarting by reason of the light being too glaring, or the eyes may be slightly inflamed and painful. Attention should always be paid to indications of this sort.

It is unnecessary to consider diseases of the eye in this paper. It may be said, however, that it is always worth while to seek advice whenever a defect of vision is noticed; for in the beginning it is often possible to prevent extension of the trouble, which, if allowed to continue, might possibly end in loss of sight.

THE TAILOR.

AN INDIAN TALE, BY ARTHUR MILTON.

CHAPTER THE FIRST.

LONG, long ago the city of Hakimpur was very famous. Its fame had grown great because there were two very wise men who lived there. To be more correct, I should say that most people thought them very wise. They both said that they had done, and could do, very wonderful things in curing people of terrible sicknesses. They were doctors. The name of one of them was Mitha

love one another. It is not often that great men, or even doctors in the same town, do love one another. I am afraid they were really jealous of one another. Now, Mitha Khan and Majusi treated their patients (if you can call it treated) with very different kinds of medicine. The one always gave sweet and pleasant medicine, while the other made up stuff that was horrible to taste, even worse (tradition says; but it is tradition only) than the powder that bears the name of Gregory. Each of these famous men claimed that his prescription had more efficacy than even a box of the most famous pills. But each said of the other's medicine very different things. Majusi used to say when he was in a confidential mood—

"I tell you what it is, sir: I know for a fact that there is nothing but sugar and water in that quack's physic."

While in a similar mood, Mitha Khan, shaking his



Khan, and the name of the other was Majusi.

I am sorry to say that these two great men did not