

Your eyes may not be quite perfect, and therefore you may experience difficulty in reading. Find out what is the matter and have it remedied at once.

The commonest conditions which give rise to difficulty in reading are "errors of refraction." By this term is meant that the optical arrangements of the eyes are not as they should be. Errors of refraction can hardly be called diseases, though if neglected they may cause disastrous results. There are three common errors of refraction which I will now describe in detail.

Long-sight (scientifically called hypermetropia) is one of the commonest errors that are met with in the eye. The name commonly given to this condition, long-sight, is rather misleading. The individuals with this error do not see farther than those whose sight is correct. Our eyes could see to infinity except that the size of objects very far off is too small to be perceptible to our vision.

What is really meant by long-sight is that the near point (that is the nearest point from the eye at which a person can read) recedes from the eye, so that a long-sighted person cannot read a book placed near her eyes, the distance, of course, varying with the amount of error present.

Long sight is met with in two very different conditions. The first is that which is so common in children and young adults; the latter (known as presbyopia) is the normal condition of the eyes of old persons. Nearly everybody becomes long-sighted at fifty; this is the reason why nearly all old people wear glasses.

The first kind of long sight is due to the eye being shorter than it ought to be. It often exists at birth, but usually does not become apparent until the child begins to read, when it is noticed that she holds the book as far away from her as possible.

Other symptoms may be present. The child may complain of headache, difficulty in recognising persons, and sometimes, not by any means rarely, she may develop a squint; the squint usually being "convergent," that is, both eyes looking inwards at the nose.

How common this condition is, can only be appreciated by those who are accustomed to examine eyes daily. A slight degree of this error gives rise to practically no symptoms and is usually not discovered except by accident. It is consequently of little importance.

But the higher degrees of long-sightedness are also very common and imperatively call for glasses. If the higher grades of long-sight are left untreated many serious effects may follow; reading being rendered impossible, education suffers to a great extent; then, as I said before, a squint may develop and often, after a time, the squinting eye may become quite blind.

The second kind of long-sight is that met with in old persons. Here is a typical case:

"Mr. H—, sixty years of age, came to me yesterday afternoon. He gave me the following history. He had always been healthy and until he was forty-nine his eyesight was perfect. Since then he has noticed that he has had to hold his newspaper farther and farther away from him until he found it necessary to hold it at arm's length. Just lately he has found this insufficient and so has had great difficulty in reading his paper.

The treatment for both forms of long-sightedness is the same, it is glasses. The spectacles used for this error are bi-concave, that is the same shape as a magnifying glass.

As individuals with long-sight can see distance plainly, glasses are not needed for distant vision, unless indeed the error be exceedingly great. Persons with long-sight, therefore, only need glasses for near vision—writing, reading and working.

The treatment of squint I will refer to later on.

The other common error of refraction is the reverse of this, it is short-sightedness. In this condition the eye is longer than it should be and the head is often of an elongated shape. This error is perhaps even more common than long-sightedness.

A person with short sight can see things near her eye tolerably distinctly, but the distance is blurred. In a slight case the person could see to work or even to recognise the faces of her friends she meets in the street, but the horizon is always indefinite. We meet with grades of this affection from as slight a case as I have described above up to almost complete blindness. People with this condition are liable to various serious diseases of the eyes.

The treatment here is, as in the former condition, glasses. But for short-sighted persons the glasses must be of a different shape; they must be concave, that is hollowed out. Such lenses as these, instead of magnifying, diminish the size of the object looked at.

In the milder grades of short-sightedness spectacles are only needed for distant vision, near vision not being very much interfered with. If, however, the error is excessive, glasses will be needed both for near and distant vision, but those for the former should be less strong.

Squint is not such a common complication here as it is with long-sight; when it does occur it is usually of the divergent variety, that is, both eyes look away from the nose.

The last error of refraction that occurs is known by the name of "astigmatism." In this condition the surface of the eye, the transparent surface or "cornea" instead of being rounded equally in all directions is spoon-shaped, being curved more in one direction than in another. Everybody has a more or less spoon-shaped cornea, but it is only when this defect is exaggerated that the possessor is aware of its existence. The symptom is that it is impossible to see horizontal and perpendicular lines at the same time. Thus, if a person with a normal eye looks at a slated roof, she will see lines crossing each other at right angles; but, if she has a spoon-shaped cornea she will not be able to see the crossing lines. She could see, either the lines parallel with the street or those going in the opposite direction, but she would be unable to see both these sets of lines at the same time.

The treatment for this is also glasses; but glasses of a peculiar shape; they must be in the form of a cylinder, convex or concave in one direction, and straight or with a different curve in the other direction—something like a rolled-up sheet of paper.

Now let us talk about squints. These are very much more common than is usually supposed. They are due chiefly to two causes—errors of refraction and paralysis of the muscles of the eye. I am not going to talk about those due to paralysis, they do not come within the scope of this paper; but I am going to tell you about those squints due to errors of refraction.

As I have told you above, the imperfections of the optical apparatus of the eye can be remedied by means of glasses. Squint never results from these imperfections if proper and suitable glasses are worn. Consequently, every one with long or short sight of severe grade (the slighter grades rarely produce squint) ought to wear spectacles. More than this every mother should find out whether her children's sight is correct, and if it is not, she should see that any fault is corrected. It is the duty of every mother to do this.

I lay particular stress upon this subject, because a week ago a woman brought her daughter to see me because the child could

not read. I examined her eyes and found that she was very long-sighted and had a tendency to squint. I told the woman what the condition was and that her daughter must wear spectacles, she replied, "If it has pleased God to make my daughter with defective eyes they ought to remain so, for no one has the right to interfere with the works of the Almighty."

I almost fell down when I heard this statement, and I must confess that, for a time, I was dumbfounded. I did not need very many minutes, however, to collect myself, and then I replied: Have we not the Divine example to cure the sick? Did not Christ Himself remove disease from the afflicted? and did He not give His apostles power to do so after He had left them? Surely this argument is sufficient to show that we have the right to do what we can to remove or remedy the diseases of our bodies. If you refer to Genesis you will see that man brought death and sorrow into the world by his fall. Hunger and thirst (as actual suffering, not the desire to eat, for this was created in man in the beginning) were also brought into the world by sin. But were our first parents to starve? Certainly not. "By the sweat of thy brow thou shalt eat thy bread." Not only were they not left to die of hunger, but they were commanded to appease their hunger at the cost of severe trouble. Is not a man also commanded to take care of his body and to do all in his power to remove another of the curses that resulted from the sin of Adam? Surely it must be so.

A physician is no magician or wizard. His knowledge is not the outcome of occult science or dealings with Satan; it is obtained by "the sweat of his brow," as truly as is the work of the labourer. By his study he fulfils his duty, and in the practice of his profession he follows as far as he is able the example of his Divine Master.

The idea held by this woman is so common, that I have given the above proofs; and surely, there can be no gainsaying that they are proofs that the idea held by her and by many others is contrary to the teaching of religion.

It is as much a duty for parents to see to the physical defects of their children as it is for them to educate or feed them.

To return to the case I was talking about; the woman was not convinced and would not let her daughter wear spectacles. Although only under very exceptional circumstances, it is right to do so, I wrote to the girl's father and told him the circumstances of the case, and he at once obtained glasses for his child.

Here is another strange popular delusion. People have an idea that looking at the tip of your nose is squinting. This is absolutely wrong; we have a special centre in the brain to enable us to converge our eyes so as to look straight in front of us. Perhaps you will say: "Oh, you must be wrong, because I knew a girl whose eyes became 'fixed' from looking at her nose." I do not doubt your word, but if you were to examine the girl's eyes you would find that she was very long-sighted, and that she converged her eyes in her violent struggle to see objects near her.

Now let us return to squints. I have said that all squints that occur as the result of errors of refraction are due to neglect to treat the cause. It must, however, be said, that sometimes in a child the squint is the first symptom which attracts notice.

The treatment is to correct the error of refraction that caused the squint. If this is not sufficient (and it is not always in old squints, especially when the squinting eye has become blind) some operation will be necessary.

Let us leave the subject of refraction and talk about an injury which, I think I may