

## November 1929

Better Eyesight

A MONTHLY MAGAZINE DEVOTED TO THE PREVENTION AND CURE OF IMPERFECT SIGHT WITHOUT GLASSES

November, 1929

Improve Your Sight

When convenient, practice the long swing. Stand with the feet about one foot apart, turn the body to the right, at the same time lifting the heel of the left foot. The head and eyes move with the body. Now place the left heel on the floor, turn the body to the left, raising the heel of the right foot. Alternate.

Rest your eyes continually by blinking. The normal eye blinks irregularly but continuously. When convenient, practice blinking in the following way: Count irregularly and blink for each count. By consciously blinking correctly, it will in time become an unconscious habit.

When the mind is awake it is thinking of many things. One can remember things perfectly or imagine things perfectly, which is a rest to the eyes, mind, and the body generally. The memory of imperfect sight should be avoided because it is a strain and lowers the vision.

Read the Snellen test card at 20 feet with each eye, separately, twice daily or oftener when convenient. Imagine the white spaces in letters to be whiter than the rest of the card. Do this alternately with the eyes closed and opened. Plan to imagine the white spaces in letters just as white, in looking at the Snellen test card, as can be accomplished with the eyes closed.

Whenever convenient, close your eyes for a few minutes and rest them.

Amblyopia

By W. H. Bates, M.D.

WHEN the sight is poor and cannot be improved promptly by glasses, the cause is usually due to amblyopia. The word amblyopia means blindness. In amblyopia the vision is less in the region of the centre of sight. One cannot have imperfect sight without having at the same time a measure of poor vision in which all parts of the field are involved. It seems curious that it is possible for the most sensitive part of the retina to become blind while other parts of the retina have considerable vision, better, in fact, than the vision obtained by the activity of the centre of sight.

Some cases of amblyopia cannot count fingers. Many others have no perception of light and yet, strange to say, the advanced cases can oftentimes be cured just as quickly as other cases in which the vision is only slightly lowered. Some cases of amblyopia may have poor vision at a distance of fifteen or twenty feet, a similar reduced vision at six inches or less, but at ten feet the vision may be nearly normal.

In most cases of amblyopia the field of vision is usually very small. Sometimes the letters regarded at fifteen feet appear to be blood red while other letters regarded at three feet may seem to be brown or to have a tint of green or some other colour. The perception of colours varies greatly at different distances. Red may look like green when the card is regarded at fifteen feet or farther—yellow may give one the appearance of blue.

For many years colour blindness has usually been considered incurable, but since amblyopia and colour blindness are usually found together, the treatment which helps or improves the sight without glasses also benefits the colour blindness. The reverse is also true; when colour blindness is benefited the amblyopia becomes less.

Since it is a truth that staring, concentration, causes imperfect sight, any treatment which relieves strain should always improve the sight or improve the vision in amblyopia and colour blindness. A great many lives have been lost as a result of acquired colour blindness. A patient with imperfect sight was brought to my office by his family physician with a history of having run into another automobile while driving his own car. When I tested his vision with the Snellen test card, I found it to be normal.

The patient was very much upset and said in his defence to me : "Doctor, I never saw that automobile." A good deal of time was spent in demonstrating that the patient had acquired amblyopia which was so complete that he really did not see the other car, but the blindness had lasted for such a short time that it was not an easy matter to prove that he had an attack of temporary blindness or an attack of amblyopia.

This phenomena has accured very often to locomotive engineers who would state after an accident that they had suddenly gone blind for a short time and when they were blind they did not see the danger signals.

One patient, a sea captain, told me that he believed that for his own safety and that of his passengers he ought to give up his occupation because he was having more and more frequent attacks of imperfect sight from amblyopia. At one time his vision was very good and he had no trouble whatsoever in seeing a lighthouse on the shore many miles away, but recently he had attacks of blindness which prevented him from recognizing the officers and sailors on his ship.

The popularity of the airplane has increased in recent years. Every once in a while a report is published of some flying machine failing to the earth and causing many deaths, because of attacks of sudden blindness suffered by the pilots. An aviator once visited me for relief. He said that some years previous he had been very much concerned about the action of his machine. The machine would start to fall, but would stop before reaching the ground. He lost control of it in the beginning, although he was positive that he acquired control again. After he had rested for a month or more, he still had the attacks of temporary blindness which cause him to lose control of the plane, although they were not so continuous.

He was told that the cause of these sudden attacks of blindness was eyestrain. The eyestrain was treated by the usual methods and treated so successfully that he drove a car for long periods of time without further attacks of sudden blindness. At one time he reported to me that if he took the trouble to practice relaxation methods he had no attacks of blindness. He was convinced that the relaxation methods prevented amblyopia and loss of mental control.

There are other occasions when these attacks of amblyopia with colour blindness have interfered with the work of some artists. A portrait painter gave a history of attacks of temporary blindness while at his work. Sometimes after devoting considerable time to his work he found that he had to do it all over again because of the attacks of amblyopia and colour blindness.

In another case a well known surgeon suffered from attacks of blindness at irregular periods. The blindness was complete so that he had no perception of light. The attacks of blindness worried him very much because he was afraid, while performing an important or dangerous surgical operation, that in the midst of it would come an attack of sudden blindness which would tend to interfere seriously with his work.

The neurologists whom the surgeon consulted all told him that he was threatened with insanity and that unless he took a long rest he might unexpectedly find himself blind and insane. Every ophthalmologist whom he consulted gave him a different pair of glasses to wear, none of which gave him any relief. He not only suffered from attacks of blindness but he was also bothered by illusions of sight.

He said nothing about the amblyopia at his first visit, but told me that he called to have something done for his eyes. He had many symptoms of discomfort and he would be very much obliged to me if I would cure him. While examining his eyes with the ophthalmoscope and seeking to find some treatment which would improve his vision, I discovered that he was suffering from amblyopia. Then he was told that the reason that his sight failed and that he had attacks of double vision was because of this amblyopia. Then began a great battle. The doctor knew a great deal about physiological optics and would not encourage me to treat him until he was convinced that I was right and he was wrong.

When he was in his office he said that where he knew there was only one light, he saw two, three, or four lights. The images in some cases were arranged one above the other and the distances between them varied within very wide limits. He said, however, that the principal illusion that he suffered from was that it seemed to him that his hands and feet were double, sometimes more than double. The size of the double images varied; sometimes one image was four or five times as large as the other. In some cases the double images were arranged one above the other, while in other cases they were arranged in an oblique direction. When he looked at a Snellen test card hanging up in my office, the bottom lines were double and the colour of each line of letters appeared different. With the aid of central fixation this illusion disappeared and did not return.

To satisfy the surgeon I made repeated examinations of his eyes with the aid of the ophthalmoscope and each time I reported that his eyes were all right and that there was nothing in either of his eyes which could explain the illusions from which he suffered. They did not come from any malformation of the interior of the eyeball but were imagined. He was very much impressed when I told him how to produce illusions of sight consciously whenever he so desired. He discovered that it was necessary to strain in order to do this and knowing the cause of his trouble made it easier for him to relieve it by doing away with the strain.

This doctor went though the World War and when he returned he came to my office and thanked me for what I had done for him. He said that he had not had a single attack of temporary blindness from the stare or strain of amblyopia, because knowing the cause of his trouble he was able to prevent it.

The great mistake that has been made for the last one hundred years or more was in ignoring amblyopia. It was astonishing to find the number of doctors who did not believe that amblyopia was of great importance. Time after time patients with amblyopia were treated in my office with success by relaxation methods. Some doctors stated very strongly that amblyopia was congenital and emphasized the matter so strongly, so continuously that most other doctors hesitated to treat amblyopia at all, but were very glad to turn such cases over to some one else.

Amblyopia

By Emily A. Bates

AS DR. BATES' article in this issue is on amblyopia, I thought that it would be a good opportunity for me to tell about some interesting cases which I have taken care of.

In 1912 when first began assisting Dr. Bates in his experimental work in the Physiological Laboratory of the College of Physicians and Surgeons in New York I had no idea that there was so much to be learned about the cure of imperfect sight without glasses. As I became more acquainted with the Doctor's work, the desire to learn more grew stronger. Each day I helped him. Watching the Doctor in his experiments with animals (these experiments were always performed immediately after the death of the animals) was most interesting and often students in the Physiological Laboratory who were doing their experimental work would stop long enough to watch Dr. Bates doing his work and making new discoveries.

I felt very proud then to stand by his side after our work at the office was finished, taking an hour before clinic time and an hour after the clinic session was over. There were times when our work together seemed almost too strenuous for me and many times I felt as though I could not go on another day. Before I offered my assistance there were doctors who tried to keep on in assisting the Doctor until his experimental work was accomplished, but in due time, one by one, they had to give up, because they could not spare enough time away from their offices and for other reasons.

Dr. Bates has always been a great reader and has studied every book written by prominent eye specialists. He always found time enough to try other ideas and experiments even while he was doing his own work. While other doctors were away for the summer months, enjoying a rest away from their work, Dr. Bates, who did not at that time believe in vacations, would sometimes be the only physician doing any experimental work at the laboratory. Occasionally Professor Lee, who in his heart believed in Dr. Bates' work and respected his ability to do what other doctors failed to accomplish, would come into the room to watch the experimental work going on.

Amblyopia not only occurs in human being but also in animals. Anyone who doubts this might ask the keeper of the zoo how an animal in captivity acts when he is under a strain. In the early spring, when animals that have been housed for the winter months, because they cannot stand the extreme cold, are first given the fresh air and more space outdoors, they wander around and about in a blind sort of fashion. Some of them toss their bodies against the tall railings which prevent them from escaping and for a while they do not know what it is all about. After a while, when they become accustomed to their new surroundings and different light, their temporary blindness wears away, and if anyone who understands the use of the retinoscope is near he will find that there is nothing wrong with the interiors of the animals' eyes.

Having had the opportunity of being with Doctor Bates during his experimental days, I was able to understand how something could be wrong with the eyesight of school children when apparently there was no organic change in the retina. I made a special study all by myself of the cure of the eyes of school children and this is what I found:

Usually children of the poor have very little or no idea of school work before they enter the school room. When it comes time for the mother to take her child to the public school, usually the mother does not know what is in the heart or the mind of that child. He has been accustomed to a little play each day in the streets and at other times was happy and familiar in the surroundings of the little place called home. Usually children are shy when visitors call; some become irritable for no reason whatever and are sometimes punished for that. The mother does not realize that strain of the mind is produced because the child either likes or dislikes the visitor. House pets such as dogs or cats which are accustomed to the members of the household usually run away and hide when a visitor calls. It doesn't require much to cause mind strain and when there is strain of the mind there is always eyestrain.

When a child is brought into a large school he feels as though he is in another world. The child meets children who seem different from those with whom he has been acquainted. He meets a teacher who tries her best to become acquainted with him and doesn't always succeed. He sees his mother leaving him to the care of those whom he has never met before. All these things have to be overcome, and this is not readily done in every case.

After a while the tests begin. Children soon have to read the writing on the blackboard. When this cannot be accomplished by the pupil it is understood that the child has imperfect sight and needs glasses. Eye tests are made with the aid of the Snellen test card and it is found that the vision is not normal. (Even the sound of the voice of the person who tests the vision has a mental effect on the child.) Then the mother receives a note saying that the child needs to be fitted for glasses.

In some schools this is still going on, but in others it is not. I found many schools using the Bates Method without calling it so. Schools in New Jersey have used the Bates Method successfully for many years, and while it has been stopped by the authorities as a daily routine, there have been a large number of children benefited by the use of the Snellen test card. In the larger cities of the United States as well in Germany, South Africa, Great Britain, Switzerland, and Spain, the Bates Method is being carried on.

A great deal of eyestrain could be prevented if children were told what to do before they begin their studies. Amblyopia could be prevented by explaining to the child how necessary it is not to stare in order to see better. Blinking irregularly but often is something that is done universally by people who have no trouble with their eyes. Animals in the same way blink their eyes often, although they themselves are not conscious of it, as far as we know. When blinking is done right the eyes move and it is seldom that amblyopia is observed in people who practice this.

In the October issue of the magazine, "Good House-keeping," there is an article entitled "A New Job for the Public Schools," by Elizabeth Frazer. Her illustration of the children studying at their desks shows mental strain as well as eye strain. In the article the following appears: "What is the matter with these children? What causes them to fail in schools? What can be done to help them? Progressive educators are beginning to ask these questions and want to help to prevent failures."

I can tell them how, for I have been with school children a good many years and have helped them along just by improving their eyesight to normal. All those who are unruly should have their sight tested every day with the Snellen test card. I can prove, if I am given a chance with a group of such children, that every one has eyestrain. I can prove that when eyestrain is entirely relieved by resting the eyes, the mentality of such children is improved. Not only does the child benefit by the Bates Method of relieving eyestrain, but the mother is relieved of a great problem and the teacher is able to teach with less mental strain for her. I am ready for an interview at any time and I shall greet with pleasure anyone who is interested enough to let me help in improving the defective eyesight of school children.

During the nine years of clinic work which was done by Dr. Bates and myself at the Harlem Hospital here in New York City, many such cases as Elizabeth Frazer describes came to us to be fitted for glasses. In my book, "Stories from The Clinic," [link] I wrote about a case of squint or cross eyes. This particular case was a little mulatto boy who first came at the age of four years, accompanied by his grandmother. He wasn't wanted in kindergarten because he was not only unruly but destructive. He was not wanted in his home where a new baby had come and where he was not safe to have around because of his cruelty. His grandmother was the only one who cared to bother with him. When he had fits of extreme nervousness, he would act exactly like a blind person and yet he was not blind. This is amblyopia.

I had to be very patient with this boy in order to do anything with him at all. His right eye turned in toward the nose so far that one could hardly see the iris. One could easily imagine the mental strain that this caused the child. Glasses had been prescribed for him, but with such a nature as he had, how was it possible to prevent the glasses from being broken? This little chap refused to wear them from the start. The family physician did not know what to do for him because physically he seemed all right and he did not know what to do for him mentally. Through some mother who had brought her child to us for treatment and whose child also had squint, this grandmother heard about Dr. Bates and his relaxation treatment for the relief of tension and eyestrain.

When I gradually won the boy over, we had to play a game at pretending. We went into the land of make believe while his eyes were closed. I also had to close my eyes frequently while treating him, because he produced a strain in my eyes as well as in his own. It was the only way I knew to treat him and obtain results. His grandmother watched him closely each time I gave him a treatment and she followed me as well as she could when she treated him at home. When the sight of his right eye improved for the test card, the right eye became straighter and he displayed less nervousness. He attended clinic regularly three days a week for some months and each time he received a treatment he became more and more patient and did as he was told by me.

Each time I tested his sight for the test card I made note of the improvement he made and so did his grandmother. He did not always do as he was told but a decided change for the better was noticed in due time and then he and his grandmother stopped coming to the clinic for a while. I did not hear from them for a year, but when he did return I did not know who he was when he spoke to me. Both eyes were straight and his vision was normal for the test card. His grandmother had brought him to me to let me see the improvement in her little boy and I was surprised to note the difference in his attitude toward her and toward me. She had helped him for an hour every day and had used the test cards as I directed her. He had in the meantime returned home to his mother and was again going to school.

A boy, aged fifteen, was brought to my attention through a patient who was treated and cured by Dr. Bates. This former patient was Mrs. H. D. Messick of Cleveland, Ohio, who has done a great deal of charity work in relieving eye strain in school children among the poorer classes. She heard of this boy whose left eye was almost blind and whose vision for the right eye was 10/30. The best eye specialist in the middle west pronounced the left eye incurable and advised him never to be without glasses for fear of going absolutely blind in the other eye. The eye which was almost blind was examined with the ophthalmoscope and nothing could be found wrong with the retina or optic nerve or any other part of the eye, yet he could not see out of that eye.

This is amblyopia or blindness without any apparent cause. The patient does not know what is wrong; neither does the doctor, yet the patient cannot see. This boy had for many years tried to improve his ability as an artist by drawing pictures of ships, but he always drew them imperfectly because he could not see them perfectly. When this boy, who was well acquainted with the Doctor's cured patient, found out what had been done for her he promised to do anything he was advised to do if he could receive help as she did. If only he would not go blind in the one eye, he said, he wouldn't mind it much having one blind eye, and the great specialist who had pronounced his apparent blindness incurable had no hope whatever for that eye.

With such thoughts in his mind I first began to treat him. When he noticed how quickly the vision improved in the blind eye, he went to work with the Bates Method as no other boy under my supervision has done since. He improved steadily, sending me reports regularly until the vision of the poor eye was normal. This was due to the help and encouragement he received from Mrs. Messick. The teachers in school knew that he had worn glasses and when he returned to school without them, they attempted to persuade him to wear them, but he wouldn't and he said that they were thrilled to notice the improvement not only in his eyesight, but in all the class work that he did under their supervision. He sent me a picture of a ship which he had drawn, after his vision became normal. "It is as perfect as any drawing could be," Dr. Bates exclaimed after he had examined it.

What was done for one boy can be done for other boys who need help as Elizabeth Frazer has explained so well in her article.

## Notice

Dr. Bates, as well as the Central Fixation Publishing Company, has been receiving a number of letters recently from people who have been unsuccessfully treated by practitioners who have not taken Dr. Bates' course of instruction and do not understand the Bates Method thoroughly.

Dr. Bates gives a course of instruction to doctors, teachers, nurses, and others who wish to practice his method professionally. At the end of the course the student receives a certificate authorizing him to help others by the Bates Method. This certificate, however, does not authorize the student to instruct others so that they may in turn teach the method. Those wishing further particulars may obtain them by writing direct to Dr. Bates at 18 East 48th Street, New York City.

## Questions and Answers

Q. My trouble is cataract. Shall I cover up the good eye while practicing?

A. Practice with both eyes together until your vision is normal. Then, cover the good eye and improve the vision of the poor eye.

Q. Often, when I am trying to see a thing, it will come to me, but my eyes will commence to smart and then I blink and lose it. What shall I do to overcome that?

A. Blinking can be done correctly, and it can be done incorrectly. You strain while you blink. The normal eye blinks easily and frequently. Strain is always accompanied by the stare. By standing and swaying from side to side so that your whole body, head, and eyes move together, the stare is lessened.

Q. What causes redness and smarting sensation of the eye even when plenty of sun treatment has been given? Should one continue with sun treatment under the circumstances?

A. Take the sun treatment frequently for five or ten minutes at a time daily, increasing the length of time until the eyes become accustomed to the sun. The eyes should always be benefited after the sun treatment, and one should always felt relaxed. When done properly, the redness and smarting should soon disappear. If the eyes are not benefited, it is an indication that you strain while taking the treatment. Alternate the sun treatment with palming or closing the eyes to rest them.

O. Is resting the eyes by palming a more effective cure for smarting of the eyes than the sun treatment?

A. This depends upon the individual. Some are benefited more by palming, while others receive more benefit from the sun treatment.

**Q.** Should motor goggles be worn as protection against wind.

A. No protection is needed against the wind if the eyes are used correctly. Blinking, shifting, central fixation, and the imagination of stationary objects to be moving, should be practiced while motoring, and, in fact, all the time. Motor goggles weaken the eyes and make them sensitive to the sunlight.

Q. Is age a factor in the cure of imperfect sight without glasses?

A. Age is not a factor.

Q. In palming should one close the eyes tightly?

A. No, easily and naturally at all times.

Q When you suggest new methods do you mean to discontinue with the old?

A. Not necessarily; all the methods I recommend have relaxation for their object. It is for the patient to determine which treatment is most beneficial and to continue its practice faithfully. Some patients tire easily when one thing is done continuously. For this reason several are suggested in order to vary the practice.

Previous Issue

TMTMTMTM"æPxt Issue

TMTMTMTM•W To Contents Page