

## March 1930

### Better Eyesight

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

March, 1930

#### How Not to Concentrate

To remember the letter O of diamond type continuously and within effort proceed as follows:

Imagine a little black spot on the right-hand side of the O blacker than the rest of the letter; then imagine a similar spot on the left-hand side. Shift the attention from the right-hand spot to the left, and observe that every time you think of the left spot the O appears to move to the right, and every time you think of the right one it appears to move to the left. This motion, when the shifting is done properly, is very short, less than the width of the letter. Later you may become able to imagine the O without conscious shifting and swinging, but whenever the attention is directed to the matter these things will be noticed.

Now do the same with a letter on the test card. If the shifting is normal, it will be noted that the letter can be regarded indefinitely, and that it appears to have a slight motion.

To demonstrate that the attempt to concentrate spoils the memory, or imagination, and the vision:

Try to think continuously of a spot on one part of an imagined letter. The spot and the whole letter will soon disappear. Or try to imagine two or more spots, or the whole letter, equally black and distinct at one time. This will be found to be even more difficult.

Do the same with a letter on the test card. The results will be the same.

#### Squint and Amblyopia: Their Cure

By W. H. Bates, M.D.

SQUINT, or strabismus, is that condition of the eyes in which both eyes are not directed to the same point at the same time. One eye may turn out more or less persistently while the other is normal (divergent squint), or it may turn in (convergent squint), or it may look too high or too low while deviating at the same time in an outward or inward direction (vertical squint). Sometimes these conditions change from one eye to another (alternating squint), and sometimes the character of the squint changes in the same eye, divergent squint becoming convergent and vice versa. Sometimes the patient is conscious of seeing two images of the object regarded, and sometimes he is not. Usually there is a lowering of vision in the deviating eye which cannot be improved by glasses, and for which no apparent or sufficient cause can be found. This condition is known as amblyopia and is supposed to be incurable after a very early age, even though the squint may be corrected.

Operations, which are now seldom advised, are admitted to be a gamble. According to Fuchs,<sup>1</sup> "their results are as a rule simply cosmetic. The sight of the squinting eye is not influenced by the operation, and only in a few instances is even binocular vision restored." This is an understatement rather than the reverse, for a desirable cosmetic effect cannot be counted upon, and in not a few cases the condition is made worse. Sometimes the affected eye becomes straight and remains straight permanently, but often, after it has remained straight for a shorter or a longer time, it suddenly turns in the opposite direction.

I myself have had both successes and failures from operations. In one case the eyes not only became straight, but binocular single vision—that is, the power of fusing the two visual images into one—was restored, and when I last saw the patient, thirty years after the operation, there had been no change in these conditions. Yet when I reported to the ophthalmological section of the New York Academy of Medicine that I had cut away a quarter of an inch from the tendon of the internal rectus of each eye, the members were unanimous in their opinion that the eyes would certainly turn in the opposite direction in a very short time. In other cases the eyes, after remaining straight for a time, have reverted to their old condition, or turned in the opposite direction. The latter happened once after an apparently perfect result, including the restoration of binocular single vision, which had been permanent for five years. The consequent deformity was terrible. Sometimes I tried to undo the harm resulting from operations, my own and those of others, but invariably I failed.

Glasses, prescribed on the theory that the existence of errors of refraction is responsible for the failure of the two eyes to act together, sometimes appear to do good; but exceptions are numerous, and in many cases they fail even to prevent the condition from becoming steadily worse.

The fusion training of Worth is not believed to be of much use after the age of five or six, and often fails even then, in which case Worth recommends operations. Fortunately for the victims of this distressing condition, their eyes often become straight spontaneously, regardless of what is or is not done to them. More rarely the vision of the squinting eye is restored. If the sight of the good eye is destroyed, the amblyopic eye is very likely to recover normal vision, often in an incredibly short space of time. In spite of the fact that the text-books agree in assuring us that amblyopia is incurable, many cases of the latter class are on record.

The fact is that both squint and amblyopia, like errors of refraction, are functional troubles, originating entirely in the mind. Both can be produced in normal eyes by a strain to see, and both are immediately relieved when the patient looks at a blank surface and remembers something perfectly. A permanent cure is a mere matter of making this temporary relaxation permanent.

Permanent relaxation can be obtained by any of the methods used in the cure of errors of refraction, but in the case of young children who do not know their letters these methods have to be modified. Such children can be cured by encouraging them to use their eyes on any small objects that interest them. There are many ways in which this can be done, and it is important to devise a variety of means so that the child will not weary of

them. For the same reason the presence of other children is at times desirable. There must be no compulsion and no harshness, for as soon as any method ceases to be pleasant it ceases to be beneficial.

The needle, the brush, the pencil, kindergarten and Montessori material, picture books, playing cards, etc., may all be utilized for purposes of eye training. At first it will be necessary to use rather large objects and forms, but as the sight improves the size must be reduced. A child may begin to sew, for instance, with a coarse needle and thread, and will naturally take large stitches. As its sight improves a finer needle should be provided, and the stitches will naturally be smaller. Painting the openings of letters in different colors is an excellent practice, and as the sight improves the size of the letters can be reduced. Map drawing and the study of maps is a good thing, and can be easily adapted to the state of the vision. With a map of the United States a child can begin by picking out all the states of a particular color, and as its sight improves it can pick out the rivers and cities. In drawing maps it can proceed in the same way, beginning with the outlines of countries or states, and with improved vision putting in the details. A paper covered with spots in various colors is another useful thing, as the child gets much amusement and benefit from picking out all the spots of the same color. With improved vision the size of the spots can be reduced and their number increased.

Many interesting games can be devised with playing cards. "Slap Jack" is a good one, as it awakens intense interest and great quickness of vision is required to slap the Jack with the hand the moment its face appears on the table.

These ideas are only suggestions, and any intelligent parent will be able to add to them.

## Case Reports

### CASE 1

Several years ago, a woman came to me with her daughter, aged ten. The child was suffering from well marked alternate internal squint. Sometimes the right eye would turn in so far that the pupil was covered over by the inner corner of the lids. At other times, the child was observed to be afflicted with internal squint of the left eye. Her mother told me that they had been to several large cities, including the capitols of Europe, where she had hoped to obtain a cure for her daughter's squint.

The child was a great reader and had read many books. Her memory was unusually good. She also had a very good imagination. She could read the ten line of the Snellen test card at more than twenty feet in a good light. When the light was poor and her vision was tested with the aid of a strange card, she was able to imagine correctly each of the four sides of any letter. For example, the letter "E" was the fourth letter on the fifth line of the test card. When the test card was placed thirty feet away in a poor light, she was unable to distinguish the letter as a whole.

After closing her eyes and covering them with the palms of both hands (palming), she imagined the left side of the "E" to be straight. When she imagined the left side of the "E" was curved or open, she strained. She imagined the top straight, and the bottom straight, and the right side open, which was, of course, correct. When any of the sides were imagined wrong, she always strained and was more or less uncomfortable.

She was then asked to imagine the fourth letter on the sixth line. She was still practicing palming. She was able to imagine the left side of the unknown letter to be straight, the top straight, the bottom open, and the right side open. She imagined that the letter was an "F" and was correct.

She was then tested with diamond type at about ten feet from her eyes, a distance at which it was impossible for her to read the letters. She was then told to palm. While palming, she was asked to imagine the first letter of the fourth word, on the fifteenth line of the diamond type. With her eyes closed and covered, she was able, without effort, by imagining each of the four sides correctly to demonstrate a letter "M." She imagined this letter so perfectly that she was able also to imagine other letters of the same word correctly. The exercise of her imagination was continued for an hour during which time she imagined correctly a number of lines of the diamond type. The result was very gratifying, because the squint disappeared in both eyes and the relief was manifest two days later.

The mother supervised the imagination of the fine print for half an hour daily for many days and weeks, with the result that at the end of six months, the child's eyes were still straight. The treatment was then discontinued, and at the end of five years, her eyes still remained straight.

### CASE 2

A girl, aged fourteen, had vision of the right eye of 3/200 while that of the left eye was 20/10. When she was two years old the tendon of the muscle which turned the right eye inwards was cut. The result was variable. Sometimes the eye turned in as before, but there were periods when the right eye was straight. Relaxation methods were employed daily with success and the squint became less when the vision improved.

The method which helped the most was to improve the vision of the amblyopic eye by remembering or imagining perfect sight of one letter of 20/10 with the eyes alternately closed and open. The vision of the right eye improved until it became 20/10. The patient was also encouraged to imagine fine print six inches from the right eye. When she succeeded in improving her vision for twenty feet and later her ability to read fine print at six inches, the squint disappeared. Both eyes focused on one point at the same time.

Central fixation or seeing best a letter or other object regarded while all other points are seen worse is a successful method of curing squint and improving the sight in cases of squint.

### CASE 3

A very remarkable patient, a girl aged eight, was treated more than fifteen years ago. The vision of the right eye was 2/200 while that of the left eye was 10/200. The right eye turned in most of the time. The vision of the left eye was improved without glasses by alternately resting the eyes.

An attempt was made to teach her how to see best where she was looking. She very soon acquired the ability to practice central fixation when the larger letters were regarded. The child became much interested when she realized that her eyes felt better, while the vision and squint improved. She practiced central fixation on smaller letters and other objects. The strain which was manifest by the contortions of the muscles of her eyes, face, and other parts of her body disappeared. Her voice became more musical with the improvement of her vision and the subsidence of the squint.

It was remarkable how well she became able to practice central fixation on very small letters and other objects. She would hold a glass slide on which a small drop of blood was mounted, and claim that she saw the red cells, the white cells, and other minute particles with her right eye while the glass slide was pressed against her eyelashes. She was able to read each letter and period in photographic reductions of the Bible, by central fixation.

Many people have complained that they could not see black or imagine a black period for an appreciable length of time. This patient, when palming, stated that black was seen and that with the aid of central fixation even the smallest black periods were seen but they were always moving a distance nearly equal to the width of the period. An effort to see always failed. Distant objects were seen, by central fixation, as far off as it was possible to imagine them.

This patient was able to produce at will, consciously, and continuously, internal squint of the right eye with the left eye straight or could keep the right eye straight while the left eye turned in.

#### Cases of Squint in the Clinic

By Emily A. Bates

AMONG the numerous letters we receive from correspondents there was one which drew my attention. Reports of cases are usually from those who have myopia or presbyopia. Cases of squint are less numerous. Most of the patients who have been treated for this trouble have been children whose ages ranged from two years to sixteen years and sometimes up to eighteen. The older ones are usually high school boys. There are just as many cases of squint among girls of school age as there are among boys, but those who have come to me for treatment were mostly boys.

The letter which caught my attention was from a man about 40 years of age who had squint of the left eye. This eye also had myopia and the other eye was farsighted. The man did not mention this in his letter, but explained how difficult it was for him to do his work under constant strain because of his eye trouble. He had subscribed to the "Better Eyesight" magazine and after reading the reports of squint cases, he mustered up courage enough to write and ask for help. To begin with he had very little money to pay for treatment and yet he did not wish to be a charity case. He had lost his wife when his two sons were quite young. Because of his affliction he had no desire to have a housekeeper in his home to take care of himself and his children. His boys were sent out to board but they were dissatisfied and this worried him. This worry caused still more mental strain to the poor man.

When he first wrote for help we could not admit him into our clinic at the Harlem Hospital because patients who lived outside of the hospital district were not admitted there. We gave him a little help for a while and in each letter he wrote he sent a grateful message for the help we were giving him. People who have not been to Dr. Bates or myself are not encouraged to take up correspondence treatment because it is unsatisfactory and we cannot diagnose a case properly under such conditions. Many have been helped by just reading our books, but they are usually the myopic and presbyopic cases.

We gave this patient an appointment for office treatment and with our help he was able to go on with his work and do it more easily and with less strain. Being employed every day and living about forty miles outside of New York City, he could come but once a week. Anyone who understands the treatment of squint cases will realize how difficult it is to make progress with a patient under these conditions. He was a temperamental type and most sensitive because of his eye trouble. For years he had avoided looking at people's faces and when I first met him his voice trembled when he answered my questions. I knew that mental strain was his main trouble.

I decided that the first thing to do was to speak to him in as low and gentle a voice as possible and see what effect that would have upon him. It was easier to speak to him with my eyes closed and while my eyes were closed I asked him to close his. I noticed that having our eyes closed while we talked had a soothing effect upon him because his voice sounded more relaxed and he was pleased because I spent enough time with him to listen to his troubles and the difficulties he had in taking time to practice with his eyes.

His vision for fine print is now normal at six inches, although it was much impaired when he first came for treatment. His vision for the distance improved but only at times did he have normal vision. Other cases of squint have been treated at the clinic but none received the care that he did because it was not required. The mental strain that he had almost constantly was the principal trouble and a stumbling block in the path of permanent benefit within a reasonable time.

In the beginning of the treatment, when I pointed to a letter of the test card at ten feet he would see it and if he forgot to blink regularly or stared at the letter it would disappear entirely and the test card was immediately a blank to him. The methods for treating him were varied from time to time because it was necessary on account of his mental condition. His vision first improved but then he seemed to lose ground and he stayed away from the clinic for a while. When he again returned he could not talk to me for quite a while nor could I treat him until he had finished weeping, which was an unusual sight to see at the clinic.

It is marvelous the fortitude and the splendid way in which some of our clinic folks go about the cure of their eyes. They have so little time to spend for themselves and yet they find the necessary time, even though it is early in the morning and late at night, to practice as they are directed to do. Patients at the Harlem Hospital Clinic have an advantage over patients in our clinic because they may be seen and treated three days each week, but this poor man had to wait until Saturday before he could come and then there were times when his work prevented him from keeping even these weekly appointments. The day he wept he told me that he had contemplated suicide and was about to do so when he remembered my voice and what I said to him at one time, which was that even though his eyes were crossed, others did not notice it as much as he was conscious of it himself. He also remembered what I said about being a coward and not being brave enough to face life as he had to face it, and that there were others who were less fortunate than he was.

I hope that those who have taken up the Bates Method and are practicing it seriously will have an extra amount of consideration for a man like that. His condition could not be reached or improved until he was relieved of tension and strain. After that was accomplished he improved steadily; he still comes for treatment occasionally. He can now read diamond type at six inches with his left eye and right eye separately and can read the fifteen line of the test card with the left eye at ten feet. Only at times is the squint noticeable.

Another squint case which we had lately was that of a little girl aged eight. She seemed to respond right from the start just for the sake of a smile. When I first became acquainted with her, she looked like a very serious little person who seldom smiled. When I greeted her with a smile and said that I could easily help her condition if she would co-operate with me she settled herself comfortably in the large arm chair where I placed her and after I had tested her sight for the distance and told her that closing her eyes to rest them was a benefit to her, she obeyed me. Her vision when tested on November 24 was 15/10 in the right eye and 15/100 in the left eye, the eye with squint. By practicing the sway and blinking, her vision improved to 15/20 in the left eye the first day, a temporary improvement.

A doctor who was especially interested in this case wrote me a letter asking me if I would see what I could do for her. In his letter he told me that glasses did not help or improve the squint and that her duties at school were a great punishment to her because she could not see the blackboard. While treating her in the beginning I used but one test card, which was a black one with white letters. Closing her eyes, remembering her best doll, and explaining to me how it was dressed, improved her vision considerably for the smaller letters of the card. Shifting while she was seated in her chair, looking first at a blank wall and then at the test card also helped to improve her vision, and as her father looked on he commented upon how straight the eye was as she shifted from the wall to the test card.

Purposely I had her stare to see the letters of the card without shifting and immediately her eye turned in as it had when I first tested her sight. Her father was given directions on how to take care of her eyes at home and she got along very nicely when all of a sudden our little girl stayed away and we did not see her for some time. She had retained the better vision she had shown upon her previous treatment and she again took up her eye work very seriously when she returned. Her sister, who is a few years older than she, came with her from time to time and learned how to help Elizabeth at home. A record was kept, not as regularly as we had wished, but it was enough to convince us that she was doing her part at home. The last time she came she read all of the card at normal distance 10/10 and both eyes were straight during the time she read the card.

When such cases are under treatment we cannot emphasize too strongly that using the poor eye or the eye with squint for a period of time each day while the good eye is covered with a patch is a benefit to the poor eye and lessens the squint. I know children do not like to wear a patch, because no one cares to have the eye with good sight covered while the eye under treatment is called upon to see everything for a length of time. At first the patch should be worn for five minutes each day and then the time gradually increased until the patient is able to wear the patch all day long. Every morning and night the test cards should be read with both eyes together and then with the poor eye alone, having the good eye covered.

I do not know of anything which helps more than the long swing, which can be practiced fifty or one hundred times by the patient each morning and night. After the long swing I usually have the patient shorten the swing so that he is able to read one letter at a time of the test card and then sway the body to the left or to the right, whichever is found to be best for the patient. If the right eye turns in it is best to sway to the right and then to the test card which is placed directly in front of the patient. In this way both eyes move at the same time in the same direction and there is no squint visible while the swing and the reading of the test card is going on. When the squint is again noticeable while reading the card and practicing the half swing, it is best to draw the card up a little closer where the patient has less strain while reading. The squint will then be less and the patient can practice better without any discomfort.

The reason why some cases of squint take longer than others is because the patient does not practice enough at home every day. Cases of squint in adults as well as in children need not only supervision but encouragement from those who are fortunate enough to have good sight. No one with imperfect sight ought to try to help such cases at home or away from our office because it cannot be done successfully. The unconscious strain which is evident when the sight is not perfect always produces more strain in the squint case which is under treatment.

One cannot encourage the patient enough to blink often, do the long swing morning and night as Dr. Bates advises often in his articles in this magazine, and if possible to do the long swing 100 times at least twice daily. While the long swing is being practiced, both eyes move together and at such times both eyes are straight. Every day one should notice how long the eye remains straight during treatment. If the eyes remain straight for just a few minutes longer from day to day the improvement will soon be noticed by the patient and this will encourage him to do more practicing.

#### Announcements

Dr. Bates wishes to announce that the following have recently completed courses of instruction and are authorized to practice the Bates Method:

Miss Mary E. Wilson,  
2538 Charming Way,  
Berkeley, Calif.

Miss Wilson is the principal of the Anna Head School for Girls in Berkeley and plans to introduce the method into the school for the prevention and cure of imperfect eight in her pupils.

Mr. Harold E. Ensley,  
112 West 104th Street, Tel. Academy 6941,  
and 45 W. 45th Street, New York City, Tel.  
Regent 9483.

Mr. Ensley was formerly a student at Princeton University.

It has come to our attention that certain parties not connected with Dr. Bates in any way are desirous of publishing a periodical called "Better Eyesight." We wish to say that any such use of this title is not with the permission of Dr. Bates or the Central Fixation Publishing Company and that any magazine issued under this title, other than the present one, is not published in the interests of the Bates Method. The title "Better Eyesight" is protected against illegal usage.

We wish to announce that after June, it will be necessary to raise the price of bound volumes of "Better Eyesight" They are now listing at \$3.00 per volume and begin with the year 1923. They contain much valuable information and we would suggest that subscribers secure any volume or volumes which they may desire before the price is raised.

We desire to inform our subscribers that the "Better Eyesight" magazine will be discontinued after the June, 1930, issue. This will enable Dr. Bates and Mrs. Bates to devote more time to the writing of new books on treatment alone for which there has been a very great demand during the past year. Subscriptions for the remaining months, however, are being received. We request that all those who desire to be notified upon the publication of new books kindly send us their names and addresses, which will be kept on file.

1. "Text-Book of Ophthalmology," authorized translation from the twelfth German edition by Duane, p. 795.

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