

## June 1921

Better Eyesight

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

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### HOW TO DEMONSTRATE THE FUNDAMENTAL PRINCIPLE OF TREATMENT

The object of all the methods used in the treatment of imperfect sight without glasses is to secure rest or relaxation, of the mind first and then of the eyes. Rest always improves the vision. Effort always lowers it. Persons who wish to improve their vision should begin by demonstrating these facts. Close the eyes and keep them closed for fifteen minutes. Think of nothing particular, or think of something pleasant. When the eyes are opened, it will usually be found that the vision has improved temporarily. If it has not, it will be because, while the eyes were closed, the mind was not at rest. One symptom of strain is a twitching of the eyelids which can be seen by an observer and felt by the patient with the fingers. This can usually be corrected if the period of rest is long enough.

Many persons fail to secure a temporary improvement of vision by closing their eyes because they do not keep them closed long enough. Children will seldom do this unless a grown person stands by and encourages them. Many adults also require supervision.

To demonstrate that strain lowers the vision, think of something disagreeable—some physical discomfort, or something seen imperfectly. When the eyes are opened, it will be found that the vision has been lowered. Also, stare at one part of a letter on the test card, or try to see the whole letter all alike at one time. This invariably lowers the vision and may cause the letter to disappear.

### FUNDAMENTALS OF TREATMENT

By W. H. Bates, M. D.

ALL errors of refraction and many other eye troubles are cured by rest; but there are many ways of obtaining this rest, and all patients cannot do it in the same way. Sometimes a long succession of patients are helped by the same method, and then will come one who does not respond to it at all.

Closing the Eyes.—The simplest way to rest the eyes is to close them for a longer or shorter period and think about something agreeable. This is always the first thing that I tell patients to do, and there are very few who are not benefited by it temporarily.

Palming.—A still greater degree of rest can be obtained by closing and covering the eyes so as to exclude all the light. The mere exclusion of the impressions of sight is often sufficient to produce a large measure of relaxation. In other cases the strain is increased. As a rule, successful palming involves a knowledge of various other means of obtaining relaxation. The mere covering and closing of the eyes is useless unless at the same time mental rest is obtained. When a patient palms perfectly, he sees a field so black that it is impossible to remember, imagine, or see, anything blacker, and when able to do this he is cured. It should be borne in mind, however, that the patient's judgment of what is a perfect black is not to be depended upon.

Central Fixation.—When the vision is normal the eye sees one part of everything it looks at best and every other part worse in proportion as it is removed from the point of maximum (central) vision. When the vision is imperfect it is invariably found that the eye is trying to see a considerable part of its field of vision equally well at one time. This is a great strain upon the eye and mind, as anyone whose sight is approximately normal can demonstrate by trying to see an appreciable area all alike at one time. At the near-point the attempt to see an area even a quarter of an inch in diameter in this way will produce discomfort and pain. Anything which rests the eye tends to restore the normal power of central fixation. It can also be regained by conscious practice, and this is sometimes the quickest and easiest way to improve the sight. When the patient becomes conscious that he sees one part of his field of vision better than the rest, it usually becomes possible for him to reduce the area seen best. If he looks from the bottom of the 200 letter to the top, for instance, and sees the part not directly regarded worse than the part fixed, he may become able to do the same with the next line of letters, and thus he may become able to go down the card until he can look from the top to the bottom of the letters on the bottom line and see the part not directly regarded worse. In that case he will be able to read the letters. On the principle that a burnt child dreads the fire, it is a great help to most patients to consciously increase the degree of their eccentric fixation. For when they have produced discomfort or pain by consciously trying to see a large letter, or a whole line of letters, all alike at one time, they unconsciously try to avoid the lower degree of eccentric fixation which has become habitual to them. Most patients, when they become able to reduce the area of their field of maximum vision, are conscious of a feeling of great relief in the eyes and head and even in the whole body. Since small objects cannot be seen without central fixation, the reading of fine print, when it can be done, is one of the best of visual exercises, and the dimmer the light in which it can be read and the closer to the eye it can be held the better.

Shifting and Swinging.—The eye with normal vision never regards a point for more than a fraction of a second, but shifts rapidly from one part of its field to another, thus producing a slight apparent movement, or swing, of all objects regarded. The eye with imperfect sight always tries to hold its points of fixation, just as it tries to see with maximum vision a larger area than nature intended it to see. This habit can be corrected by consciously imitating the unconscious shifting of the normal eye and realizing the swing produced by this movement. At first a very long shift may be necessary, as from one end of a line of letters to another, in order to produce a swing; but sometimes even this is not sufficient. In such cases patients are asked to hold one hand before the face while moving the head and eyes rapidly from side to side, when they seldom fail to observe an apparent movement of the hand. Some patients are under such a strain, however, that it may be weeks before they are able to do this. After the apparent movement of the hand has been observed, patients become able to realize the swing resulting from slighter movements of the eye until they are able to look from one side to another of a letter of diamond type and observe that it seems to move in a direction contrary to the movement of the eye. A mental picture of a letter can be observed to swing precisely as can a letter on the test card and, as a rule, mental shifting and swinging are easier at first than visual. The realization of the visual swing can, therefore, be cultivated by the aid of the mental swing. It is also an advantage to have the patient try to look continually at some letter, or part of a letter, and note that it quickly becomes blurred or disappears. When he thus demonstrates that staring lowers the vision he becomes better able to avoid it. When visual or mental swinging is successful, everything one thinks of appears to have a slight swing. This I have called the universal swing. Most patients get the universal swing very easily. Others have great

difficulty. The latter class is hard to cure.

**Memory.**—When the sight is normal the mind is always perfectly at rest, and when the memory is perfect the mind is also at rest. Therefore it is possible to improve the sight by the use of the memory. Anything the patient finds agreeable to remember is a rest to the mind, but for purposes of practice a small black object, such as a period or a letter of diamond type, is usually most convenient. The most favorable condition for the exercise of the memory is, usually, with the eyes closed and covered, but by practice it becomes possible to remember equally well with the eyes open. When patients are able, with their eyes closed and covered, to remember perfectly a letter of diamond type, it appears, just as it would if they were looking at with the bodily eyes, to have a slight movement, while the openings appear whiter than the rest of the background. If they are not able to remember it, they are told to shift consciously from one side of the letter to another and to consciously imagine the opening whiter than the rest of the background. When they do this, the letter usually appears to move in a direction contrary to that of the imagined movement of the eye, and they are able to remember it indefinitely. If, on the contrary, they try to fix the attention on one part of the letter, or to think of two or more parts at one time, it soon disappears, demonstrating that it is impossible to think of one point continuously, or to think of two or more points perfectly at one time, just as it is impossible to look at a point continuously, or to see two points perfectly at the same time. Persons with no visual memory are always under a great strain and often suffer from pain and fatigue with no apparent cause. As soon as they become able to form mental pictures, either with the eyes closed or open, their pain and fatigue are relieved.

**Imagination.**—Imagination is closely allied to memory, for we can imagine only as well as we remember, and in the treatment of imperfect sight the two can scarcely be separated. Vision is largely a matter of imagination and memory. And since both imagination and memory are impossible without perfect relaxation, the cultivation of these faculties not only improves the interpretation of the pictures on the retina but improves the pictures themselves. When you imagine that you see a letter on the test card, you actually do see it because it is impossible to relax and imagine the letter perfectly and, at the same time, strain and see it imperfectly. The following method of using the imagination has produced quick results in many cases: The patient is asked to look at the largest letter on the test card at the near point, and is usually able to observe that a small area, about a square inch, appears blacker than the rest, and that when the part of the letter seen worst is covered, part of the exposed area seems blacker than the remainder. When the part seen worst is again covered, the area at maximum blackness is still further reduced. When the part seen best has been reduced to about the size of a letter on the bottom line, the patient is asked to imagine that such a letter occupies this area and is blacker than the rest of the letter. Then he is asked to look at a letter on the bottom line and imagine that it is blacker than the largest letter. Many are able to do this and at once become able to see the letters on the bottom line.

**Flashing.**—Since it is effort that spoils the sight, many persons with imperfect sight are able, after a period of rest, to look at an object for a fraction of a second. If the eyes are closed before the habit of strain reasserts itself, permanent relaxation is sometimes very quickly obtained. This practice I have called flashing, and many persons are helped by it who are unable to improve their sight by other means. The eyes are rested for a few minutes, by closing or palming, and then a letter on the test card, or a letter of diamond type, if the trouble is with near vision, is regarded for a fraction of a second. Then the eyes are immediately closed and the process repeated.

**Reading Familiar Letters.**—The eye always strains to see unfamiliar objects, and is always relaxed to a greater or lesser degree by looking at familiar objects. Therefore, the reading every day of small familiar letters at the greatest distance at which they can be seen, is a rest to the eye and is sufficient to cure children under twelve who have not worn glasses as well as some older children and adults with minor defects of vision.

In the treatment of imperfect sight these fundamental principles are to a great extent interdependent. They cannot be separated as in the above article. It is impossible, for instance, to produce the illusion of a swing unless one possesses a certain degree of central fixation. That is, one must be able to shift from one point to another and see the point shifted from less distinctly than the one directly regarded. Successful palming is impossible without mental shifting and swinging and the use of the memory and imagination.

## STORIES FROM THE CLINIC

### 16: Methods That Have Succeeded

By Emily C. Lierman

The patients who come to our clinic do wonderful things, especially the schoolchildren. We can give each one of them, as a rule, only about five minutes of our time, and yet they are able to carry out the instructions given to them at home, and to get results. This is a great tribute to their patience and intelligence.

Most of the children, and of the grown people as well, are helped by palming, and some wonderful cures have been obtained by this means alone. In my first story for this magazine I told about a little boy named Joey whose left eye had been so injured in an automobile accident that he had only light perception left. It was some time before I could get him to palm regularly, but as soon as he became willing to do it many times a day his sight began to improve rapidly, and he is now completely cured.

There are some patients, however, who cannot or will not palm. One of these was a little colored girl, with corkscrew curls, for all the world like Topsy. She had been sent to the clinic because she could not see the writing on the blackboard, and the school nurse told me later that she was very unruly and a great trial to her teacher. She was something of a trial to me too at first, for I could not get her to palm for a moment, and did not know what to do with her. Then I discovered that she had a wonderful memory when she chose to use it, and I resolved to treat her by the aid of this faculty. I was able to improve her sight considerably, and the very next day her teacher noticed such a change in her behavior that on the next clinic day the school nurse came with her to see what I had done. I then asked her to remember, with closed eyes, a letter on the test card grey instead of black. She could not stand still a minute while she did so, and when she opened her eyes there was no improvement in her vision. Then I asked her to remember the blue beads she had around her neck. She did so for five minutes, standing perfectly still all the time, and when she opened her eyes she read an extra line on the test card. I had her do this again, and again she read an extra line. The nurse was thrilled by this demonstration of the fact that perfect memory improves the sight and relieves nervousness.

Recently a poor young man called at our magazine office and asked if Dr. Bates had written a book about the treatment of the eyes. When told that there was such a book, he bought it and also subscribed for the magazine. His sister was being treated at the clinic, he said, and he wished to take off his glasses as she had done. Later he came to the clinic, as he lives in the hospital district. I found that he could not read newspaper print without his glasses, while his distant vision was 12/70, both eyes. This was about six months ago. He now reads diamond type, and last week his sister asked Dr. Bates if he had finer print, as her brother found the diamond type so easy that he wanted something smaller. Dr. Bates gave her a page from a photographic reduction of the Bible, and he reads this also without any trouble. The methods he used were swinging and flashing, together with palming.

The influence of this cure has been extensive and is still going on. The patient loaned the book to a myopic youth in his office, and by means of palming he was able to improve his sight so that now he dispenses with glasses for long periods. An elderly man in the same office thought the

palming a very absurd practice but, having borrowed the book, he started shifting and flashing at lunch time, just to pass the time. He now does much of his work without glasses.

A Jewish mother came to the clinic recently with her little girl of eight, and said the child must have glasses. The school nurse had said so. I replied that I was very sorry indeed, but that Dr. Bates did not fit glasses, and she would have to call some other day and see the doctor who did do so. She was about to leave the room when I suggested that I should test the child's sight. I felt sorry for the little girl, because she was very pretty, except for her eyes, which were partly closed most of the time.

"I don't like to wear glasses," she said. "Please help me so that I won't have to wear them."

The mother seemed bewildered at first, and then she said in a burst of confidence:

"You know, nurse, if der glasses was fer notthink, I should worry. But all der time money, money fer glasses, when all der time she breaks dem."

I told the poor mother not to worry, because her child could be cured so that she would not need glasses if she would do what I told her to do.

"Sure, sure," she replied. "Det's all right, lady. You fix her eyes, yes? Ven ve don't buy glasses ve got more money to buy someding for der stomach, yes?"

An Irish woman was standing by, and she just roared with laughter. I had to use some tact to keep peace in the room, and I thought it best to usher the Irish woman outside until I had treated the little girl, who turned out to be a very interesting patient. We have some bright children in our clinic, and I am proud of them; but this dear little girl beat them all. She did such a wonderful thing that Dr. Bates was thrilled. Jennie had never seen the test card before, and after palming was able to read only the thirty line at fifteen feet. Below this the card was a blank to her. I asked her to follow my finger while, with very rapid movement, I pointed to the large letter at the top and so on down to the ten line. I now asked her to palm, and, pointing to the last letter on the ten line, which was an F, and quite small, I asked her if she could remember some letter her teacher had written on the blackboard that day. She replied:

"Yes, I can imagine I see the letter O, a white O."

"Keep your eyes closed," I said, "and imagine that the letter I am pointing at has a curved top. Can you still imagine the O?"

"No," she said: "I can't imagine anything now."

"Can you imagine it is open, or straight at the top?" I asked.

She became excited and said: "If I imagine it has a straight top, I can still remember the white O."

"Fine," I said. "Can you imagine it has a straight line at the bottom?"

"No," she said, "if I do that I lose the O. I can imagine it's open much better."

"Good," I said. "It is open. Now imagine it is open or curved to the left."

"I lose the O," she said, "if I imagine the left side open or curved. I think it's an F, nurse."

And when she opened her eyes she saw it plainly. The fact was that, although she had been unable to see this letter consciously, she had unconsciously seen it for a fraction of a second and could not imagine it to be other than it was without a strain that caused her to lose control of her memory. And when she imagined it to be what it was she relaxed so that when she opened her eyes she was able to see it.

A little later a school nurse brought us a child who was giving her teacher a lot of trouble because she could not remember anything, and it was thought glasses might help her. She was very nervous, frowned terribly and at twelve feet the letters on the bottom line of the test card were only black spots to her. As I could not get her to palm, I asked her to look at a letter on the bottom line and with closed eyes imagine it had a straight top. She could not do this and said she could imagine it curved better. Then she found she could imagine two other sides curved and one open, and when she opened her eyes she saw the letter, a C, distinctly, and had stopped frowning. By the same method she became able to read all the other letters on the bottom line, demonstrating that her imperfect memory had been due to eyestrain. She had unconsciously seen the letters, but the eyestrain had suppressed the memory of them. With her eyes closed the strain was relaxed, and she became able to remember, or imagine, them.

## MY METHODS WITH SCHOOL CHILDREN

By a Public School Nurse

Editor's Note.—Better Eyesight considers itself fortunate to be able to publish this remarkable record of the improvement of the vision of school children by means of the methods which it advocates. The attitude of the educational authorities toward the beneficent work of this public-spirited nurse is noteworthy.

On re-reading an article in the August 1920 issue of Better Eyesight [\[link\]](#) I find that a nurse, after inquiry in regard to treatment of the eyes without glasses, and observations at Dr. Bates' Clinic, said she would treat the children at school in the same way. I started last fall, in a district school located in one of the suburbs of New York City, to do likewise, but, unfortunately, after having helped several children, I am advised by the school authorities to discontinue. However I shall give some idea of the work already accomplished.

In the examination for records of the children's eyesight, etc., I found several quite below normal—some with one eye more than normal and the others far below. In one case for instance, the left eye was 20/13 and the right 9/200. This child, Catherine, after having been shown how to practice, was able to help herself by cutting the letters from a newspaper and pinning them to the wall until she procured a test card. At the present time her sight is 12/50 in the right eye, a four-fold improvement. All this she has done by her own efforts and practice at home. I have helped her only once since the first examination in the latter part of March. Her mother has taken off her glasses, too, and does not suffer any more with burning of the eyes, as she did formerly. She is grateful, and much pleased with her success.

Another child I brought to the clinic, and Dr. Bates saw him after I had helped to correct a squint in the left eye, which remains straight unless he strains. The correction occurred at the beginning of the school year. The child's sight has also improved, in spite of the fact that he practices less at home than any of the others and needs constant urging.

The children come to me just before the close of the morning session, sometimes for only fifteen minutes. They palm and do the swing, either the head alone or the entire body. Lately I've found that the swing was more successful than palming alone.

When examining the children in the classroom I found they could read the twenty line at twenty feet after starting at thirty or forty, if the strain was relieved in this way: I would point to a letter or number on the thirty or forty line and then return to the twenty line. Almost immediately they would read 20/20.

One boy I started at 20/20. For some reason he could not read a letter until he got to the top of the card. I then had him palm and read with each eye alternately. In a few moments he had read correctly every line to the very end—20/20.

All the children are greatly interested and pleased with their progress, and the parents fully approve. In every instance I have let the parents decide whether or not the children should be treated so that they would not need glasses. The children themselves say very emphatically that they will not wear glasses.

#### QUESTIONS AND ANSWERS

All readers of this magazine are invited to send questions to the editor regarding any difficulties they may experience in using the various methods of treatment which it recommends. These will be answered as promptly as possible, in the magazine, if space permits, otherwise by mail. Kindly enclose a stamped, addressed envelope.

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