

## October 1921

Better Eyesight

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

October, 1921

### HOW TO OBTAIN MENTAL PICTURES

Look at a letter on the Snellen test card.

Remember its blackness.

Shift the attention from one part of this spot of black to another. It should appear to move in a direction contrary to the imagined movement.

If it does not, try to imagine it stationary. If you succeed in doing this it will blur, or disappear. Having demonstrated that it is impossible to imagine the spot stationary, it may become possible to imagine it moving.

Having become able to form a mental picture of a black spot with the eyes closed, try to do the same with the eyes open. Alternate until the mental vision with the eyes closed and open is the same.

Having become able to imagine a black spot try to imagine the letter o in diamond type with the center as white as snow. Do this alternately with eyes closed and open.

If you cannot hold the picture of a letter or period, commit to memory a number of letters on the test card and recite them to yourself while imagining that the card is moving.

If some other color or object is easier to imagine than a black spot it will serve the purpose equally well.

A few exceptional people may get better results with the eyes open than when they are closed.

### MENTAL PICTURES AN AID TO VISION

By W. H. Bates, M.D.

WHEN an object is seen perfectly it is possible to form a perfect mental picture of it; when it is seen imperfectly this cannot be done. Persons with ordinarily good vision are able to form a perfect mental picture of some letter of the alphabet especially a letter of diamond type, when looking at the Snellen test card, or at fine print; but persons with ordinarily imperfect vision can do this only under certain favorable conditions, as with their eyes closed, or when looking at a blank surface where there is nothing particular to see. They may also be able to do it when looking at objects at a distance at which their vision is fairly good, as in the case of near objects in myopia. Persons with ordinarily good vision, on the other hand, have moments when they see imperfectly, and at such times their mental pictures are imperfect.

These facts are of the greatest practical importance, because many persons easily learn how to form mental pictures, and when they become able to do so under all conditions their sight becomes perfect.

Mental vision is subject to precisely the same laws as visual perception. The mental picture must be seen or imagined by central fixation; that is, one part of it at a time must be seen best, and the attention must shift continually from one point to another. This shifting of attention produces a swing which is even more pronounced than the visual swing. Furthermore, the mind adds details that do not exist in the object remembered or imagined. If this object is a black letter on a white background, for instance, the white openings and margins will appear more intense than the reality.

It is not possible to retain a mental picture of a letter o of diamond type when one tries to think of one point continuously. The point may be remembered for a brief interval—a few seconds or part of a minute; then it is lost and with it the whole letter. One cannot, in short, "stare" at a point with the imagination any more than one can stare with the eye, and if one tries to do so the point disappears. If one tries to think continuously of two points of the letter, imagining them both to be equally black at the same time, the picture is lost more quickly. To think of four points or more, or to think of the whole letter perfectly black at the same time, is still more difficult.

Mental pictures cannot be retained for any length of time unless they appear to move. This movement may be so slight and easy that it is not observed until the attention is called to it, and even then it may not be realized. Some patients have told me that they could remember small letters of diamond type easily and continuously, and that they were not moving. Usually the patient can demonstrate the facts by trying to think of one part of the letter as stationary. In this case it immediately disappears. But the effort to keep the attention fixed on a point is so great that some patients cannot or will not make it. It is easier to let the attention shift naturally. In such cases I direct them to look at the letter o so close to their eyes, or so far away, that they are unable to see it clearly, and call their attention to the fact that now it seems to be stationary. Then I have them look at the letter at the distance at which they see it perfectly and ask them to imagine it stationary, as the letter at the preceding distance seemed to be. Usually they are able to do this, and to note that the letter blurs or disappears. After they become able to imagine that a letter which they see is stationary, they become able also to imagine that their mental picture of it is stationary, and to note that it cannot be held more than a moment under these conditions.

To imagine that other things seem to be moving helps some people to form and retain mental pictures. One patient, whose mental pictures were very poor, became able, when walking around the room and imagining things moving in the opposite direction, to imagine that a letter "o" was moving in the same direction as the furniture.

A mental picture need not be a complicated one. The perfect memory or imagination of even a small spot of color is sufficient to cure all errors of refraction—nearsight, farsight, and astigmatism—as well as many other abnormal conditions. But to form a perfect mental picture of a spot of color—say a black period—is not always easy. One may think one is imagining a black period perfectly, but when one compares one's mental picture with the reality, one usually finds that the former is several degrees paler than the latter. It is usually easier to form mental pictures with the eyes closed than with the eyes open, and by imagining a period, or other object, with the eyes closed and open alternately one can improve one's ability to imagine it under the latter condition. In a few exceptional cases, however, mental pictures are better and are more easily held with the eyes open than when they are closed.

When the sight is imperfect it is always easier to hold a mental picture when looking at nothing in particular than when looking at letters or other objects at distances at which they cannot be seen distinctly. To improve the ability to hold them under the latter conditions it is necessary, alternately, to imagine the object with the eyes closed, or looking away from the Snellen test card or printed page, and then to look back at the Snellen test card or reading matter.

Persons unable to imagine a period or letter may succeed with other objects. For example, one patient who could not imagine a white card with black letters on it which she had just seen in her hand was able, with her eyes closed, to imagine the color of her house, one part best, and the different objects—curtains, furniture, etc.—in the different rooms. She was able to see the lawn, the flower-bed, the numerous flowers, one part best, and to imagine the color of the eyes of her friends. After that she became able to imagine the white card with the black letters.

Persons who suffer from pain, fatigue, or other discomfort to their eyes, have great difficulty in forming mental pictures. Such persons, although they cannot remember a letter or other objects, are often able to remember the movement of a card held in the hand. If they cannot do this at first, they may become able to do it by alternately looking at the card and then closing their eyes and trying to recall the movement. When they become able to do this the pain stops and the sight becomes temporarily normal.

Most people are helped by learning how to fail. When they demonstrate that their sight is lowered by an imperfect mental picture, they become able to avoid such pictures. A patient with squint was cured when she learned to imagine double images. At first, with her eyes open, she could not imagine them more than two inches apart. Later, with her eyes open, she got them four feet apart, while, with her eyes closed, she could imagine one Snellen test card on one side of a bay five miles wide and another on the other. These images could be imagined either crossed or homonymous at will; that is, each eye sometimes seemed to see the image on its own side, and at other times the image seemed to be on the opposite side. When the images were homonymous the eyes turned in, and when they were crossed the eyes turned out. By means of this practice the patient gained such a degree of mental control that her eyes became almost continually straight, the slight occasional deviation not being noticeable.

## AN ARTIST'S EXPERIENCE WITH CENTRAL FIXATION

By Florence Cane

This patient consulted the editor on July 20, 1921, because her vision was getting worse, and she suffered from a constant feeling of strain and fatigue in her eyes. She had worn glasses since she was seven years old for hypermetropia, commonly called farsightedness, and was now wearing convex 4.00 D. S., a rather strong lens. Yet without her glasses she was able to read fine print imperfectly, and by the aid of her memory she became able at the first visit to read it at six inches. Her discomfort was relieved at the first visit, and her distant vision, which had been imperfect, though better than her near vision, also improved.

I have made a few observations while improving my eyesight by the methods recommended by Dr. Bates, and many thoughts and questions regarding them have suggested themselves to me.

The first thing I remember observing on leaving the doctor's office after my first treatment was a new sense of movement and life. Never before had I seen such dear, bright color in the crowd. I walked toward the library on Fifth Avenue, and never had the sun shone so brightly, or the world looked so exciting. My heart beat faster and I felt a great elation, as if a new vision, a new power, had been given me.

The second thing I remembered was that I sat down the same evening with *The Cure of Imperfect Sight by Treatment Without Glasses* [link], determined to see what I could do without my glasses. I found that by shifting and palming I could read a sentence or two, later more, and after a while I could read a paragraph without stopping. I found shifting from a point above a word to one below it particularly helpful.

I went to bed at ten o'clock, but was so excited after reading there until twelve that I could not sleep much. The magnitude of the truth thrilled me. The relation of sight, memory and imagination to body, mind and soul—the use of one faculty to strengthen another—seemed to be such a wonderful conception.

Soon I observed that looking upward seemed to improve my sight. I took to practicing on high objects out of doors. I shifted on points like two apples in a tree, or on the clouds. This helped me very much, and overcame my shrinking from light. I found that I had never walked with my eyes really open before. When I told Dr. Bates about it, he said it was the light that helped me, not the height of the objects I looked at.

I have had several experiences in the application of the principles of central fixation which seem interesting enough to communicate to the readers of *Better Eyesight*. The first occurred when I had mislaid something. I had looked everywhere for it in vain. I sat down and palmed and, quietly but suddenly, I saw in my mind where I had laid it. I got up and looked, and it was there.

I burned myself at a beach fire on a piece of wood that I picked up. It had been in the fire, but it was dark and I did not notice it. I burned my thumb quite badly-enough to raise a big blister. It was very painful, and I had no remedy at hand. I remember that I had read in Dr. Bates' book about central fixation in relation to pain, and I tried remembering the small o; After a few minutes the pain ceased until I could not tell which thumb I had burned. The same thing happened after a bee had stung me; and one night when I had a severe cold and could not sleep because of difficulty in breathing, I was greatly helped by seeing the period and making it swing. I fell asleep and continued seeing the period in my sleep.

In painting I have had the most interesting experiences of all. If I am working from the memory or imagination and it won't come the way I want, I try palming. The first time this happened. I was painting a lake with some birches at one side. I just couldn't remember how birches grew, and the trees wouldn't look right. So I closed my eyes and waited, and soon a vision came to me of myself walking in a young birch wood that I used to know; I saw how the branches grew, and felt the white glimmer of reflected light from the bark, and the tender young green of the fragile leaves, and I painted the birches with ease and joy. This use of palming may be of great value to artists, because the artist works from the image, and sometimes this image is lost. By straining and effort he cannot regain it, but by palming he may.

I have also had interesting experiences in treating others, my first pupil being my little girl. She had a great fear of the water, so that she could not let herself go, and float face down. She has a cat of which she is very fond; so I suggested that she recall her cat washing itself when she tried to float. She did this and was able to float for twelve seconds.

Another case of interest was that of a woman who was in a nervous condition, overwrought and discouraged over her problems. I began teaching

her how to improve her eyesight and at the first lesson she made such great progress that she was overcome with happiness. The magnitude of the thing she had done gave her a sense of control over herself, a new sense of power. She said, "If I can do this, why I can do anything." And it is true; she has pulled herself out of the overwrought state.

Among all the people with whom I have talked, or to whom I have tried to explain these ideas, I have met only one with a perfectly rigid mind. He was, as one would expect, a pure scientist of very high standing. He wouldn't even admit that his hand appeared to move when he swung his head from side to side with his hand eight inches before his eyes. He said it merely made him dizzy. He knew the hand was in a fixed position, so it couldn't appear to him to move. This statement showed that he only used half his functions. He used his reason but refused to allow his senses to record how things appeared.

There is one thing Dr. Bates has said that I want to question. "We can see only what we imagine, and we cannot imagine something which we have not seen or experienced." As an example, he gives our inability to imagine a foreign alphabet. Well, if that statement is true, how do we get at a new truth? I think it is from the imagination. One can conceive of new forms in art, and I should judge that a scientist must conceive a possible truth in his imagination, and then set about testing it by experiment and observation. The marriage of the two—facts and imagination—creates new truth and widens man's consciousness. This Dr. Bates has done. But he has only called imagination good. I think it is infinite, and by penetrating deeper into its mystery we are penetrating into the source of man's growth.

## STORIES FROM THE CLINIC

20: St. Vitus' Dance and Myopia

By Emily C. Lierman

HYMAN, age ten, came to the clinic not as a patient, but as his mother's escort. She was having her eyes treated, but her trouble was not half as bad as that of her son. His poor eyes stared painfully behind his thick glasses, and in order to see through them at all he made the most awful grimaces I ever saw. His head moved constantly in all directions, and later on I discovered that he had St. Vitus' Dance. He was an unusually bright boy, and was never satisfied unless he saw and knew everything that was going on in the Clinic. Whenever he was in the room he would stay as close to me as possible, listening eagerly to every word I said and watching every movement I made. One day I said to him:

"Look here, young man, I don't mind having you watch me, but I don't think the patients like you to stare at them so much. If you want to know how I cure people, why don't you get cured yourself so that you won't have to wear glasses?"

"My teacher says I must wear glasses because I cannot see the blackboard without them," he replied.

I explained to his mother that I was sure I could cure not only his eye trouble, but also the nervous twitching of his head. She did not seem to understand me, and I'm sure she doubted my ability to do anything at all for him. The boy himself seemed to be equally skeptical, but was, nevertheless, much interested. He was evidently curious to know what I would do for him, and quite willing to let me entertain him.

I tested his sight with his glasses on and found that he was able to read only 10/50, all the rest of the card being a blur. I then took the glasses off and noticed that he stared less without them. In addition his personal appearance was greatly improved, for the glasses had made him look hideous. I now told him to cover his eyes with the palms of his hands so as to exclude all the light, and to remember something perfectly. He seemed to think this was a game of hide and seek, and kept continually looking through his fingers. My patience was considerably tried, but I did not let him see this. Instead I told him that I was especially fond of little boys, and wished to help him. He squared his shoulders and made an effort to keep his head still, but failed. Finally I succeeded in making him understand that if he wanted to stop the twitching of his head, he must keep his hands over his eyes until I told him to take them down. He now became as serious as I was myself, and though I watched him while I was treating other cases, I did not once see him uncover his eyes, or peep through his fingers. No doubt the fifteen minutes that he spent in this way seemed like hours to him. When I was able to return to him, I said very gently:

"Now take your hands from your eyes and look at me."

He did so, and to my delight his head was perfectly still, I now told him a story—being careful to preserve the same gentle tone of voice—about a boy who lived in the country town where I live and who stole some delicious big apples from a farmer. He ate too many of the apples, and soon began to feel that there was something wrong with his stomach. Then the farmer caught him and punished him; so he suffered both inside and out, and came to the conclusion that stealing apples was not very much fun. I took as long as I could to tell this simple tale, for my object was to keep my patient from thinking of himself, or his eyes. He seemed to find it hugely amusing. His eyes beamed with fun while he listened to me, and his head never moved once.

"Now," I said, "do some more palming for me, and then we will read the card."

When he uncovered his eyes the second time, his vision had improved to 10/30. By this time his mother's indifference had vanished. She did not know how to show her gratitude for what I had done for her boy, but promised to see that he spent a sufficient amount of time palming every day. The next Clinic day she told me that the twitching of the head had become less frequent. She was instructed to watch the boy and have him palm at once whenever she noticed the twitching. This always relieved the trouble.

Hyman was anxious to be cured before vacation began, and was quite willing to do as he was told. He came to the clinic for two months, and at the last few visits there was no twitching, while his vision had improved to 12/10.

## LET YOUR EYES ALONE

By James Hopper

I PERFORM now and then an experiment which, I think, will interest the readers of Better Eyesight. It affords a striking proof of two of Dr. Bates' contentions: Number 1, that no defect of the eye is fixed, that the refraction of the eye is variable. Number 2, that the perfect refraction which means perfect sight is obtained through relaxation. Here is what I do, using first one eye, then the other:

I close the left eye, and then, taking the card with the Seven Truths of Normal Sight printed in diamond type, I place said card right up against the tip of my nose. (Parenthetically speaking, my nose is not flat, nor is it of great length. An average nose I'd call it.)

I place the card right up against the tip of my nose, and, with my left eye closed, look at it with my right eye. My right eye is my bad one. It had only one half of normal sight when I first saw Dr. Bates.

Looking at the card, thus placed against my nose, I see at first nothing—or simply blurred lines.

Then consciously I relax my eye, I "let it go." I can do that only gradually. I let go and let go. The best way I have found to do this is to keep my

mind off the idea of reading the card, and to think of something else—a football game, a play—anything.

I can feel my eye gradually relax. There is no mistaking the process. It is one of relaxation, of letting go. And there is degree after degree of letting go. Just when I think I have reached the limit of relaxation, I feel the eye let go another notch. And then, suddenly—so suddenly it almost scares me—and clearly—so clearly it is almost weird, I see the diamond type and I read the Doctor's Seven Truths!

Each letter is not only black and sharp and distinct, but it is almost gigantic—two or three times the size it was when seen at six inches.

There is no doubt to me that my eye has passed from a state of not seeing the type to one of seeing the type. Hence that the refraction of my eye is variable.

And there is no doubt to me that the passing from the state of not seeing the type to the state of seeing the type is obtained through relaxation of the eye.

And the counter proof also exists. If, while I am seeing the type perfectly and big, I set my mind deliberately to reading it—it abruptly disappears.

Working consciously, I have done something with my eye which has made it an instrument that cannot see at that distance. Working consciously, I have tightened some muscles or other, so that the eye has now the wrong shape for seeing at that distance.

Moral: Let your eyes alone, and they do the right thing. Interfere with them, butt in with your conscious will and— presto—they do the wrong thing.

## 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.

Previous Issue

TMTMTMTM"æPxt Issue

TMTMTMTM•W To Contents Page