### August 1920

Better Eyesight

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

August, 1920

#### THE CURE OF IMPERFECT SIGHT IN SCHOOL CHILDREN

While reading the Snellen test card every day will, in time, cure imperfect sight in all children under twelve who have never worn glasses, the following simple practices will insure more rapid

- 1. Let the children rest their eyes by closing for a few minutes or longer, and then look at the test card for a few moments only, then rest again, and so on alternately. This cures many children very promptly.
- 2. Let them close and cover their eyes with the palms of their hands in such a way as to exclude all the light while avoiding pressure on the eyeballs (palming), and proceed as above. This is usually more effective than mere closing.
- 3. Let them demonstrate that all effort lowers the vision by looking fixedly at a letter on the test card, or at the near point, and noting that it blurs or disappears in less than a minute. They thus become able, in some way, to avoid unconscious effort.

The method succeeds best when the teachers do not wear glasses.

Supervision is absolutely necessary. At least once a year some person whose sight is normal without glasses and who understands the method should visit the classrooms for the purpose of answering questions, testing the sight of the children, and making a report to the proper authorities.

The Snellen test card is a chart showing letters of graduated sizes, with numbers indicating the distance in feet at which each line should be read by the normal eye. Originally designed by Snellen (or the purpose of testing the eye, it is admirably adapted for use in eye education.

#### SAVE THE CHILDRENS' EYES

With this issue of Better Eyesight we are again urging measures to prevent and cure imperfect sight in school children. A very simple method by which this can he done was discovered by the author while studying the vision of the school children of Grand Forks, N. D., and tested over a period of eight years in the schools of this city. It consists merely, as has been frequently stated in this magazine, of exposing a Snellen test card in each classroom, and having the children read the lowest line they can we from their seats once a day, or oftener.

Six or seven years ago this system was tried in some of the public schools of New York City with the most gratifying results. In every case in which the card was used properly the vision of the children improved, regardless of whether the classroom was well or poorly lighted; and in every case in which it was not used the vision declined, being worse at the end of the year than it was at the beginning, regardless also of the lighting of the room. Not only was myopia (shortsight) prevented and cured by this method, but hypermetropia (farsight), a much greater curse than myopia and one the prevention of which had not previously considered, was also prevented and cured. So also was astigmatism, while the sight of those children whose sight had been normal to begin with was improved. Headaches and fatigue were relieved. The mentality of the children improved. Truants and incorrigibles were reformed. The teachers were enthusiastic about the results.

But unfortunately the method was contrary to the teachings of a hundred years, and hence was condemned without trial by every eye specialist consulted by the Board of Education. And thus the children, not only of New York, but of the whole country, have been deprived for years of the blessing of perfect sight, for if New York had led the way, the whole country would have followed.

Through the efforts of this magazine, however, a few schools here and there have introduced the system, and we hope that before another year has elapsed there will be many more of them. An

## IMPERFECT SIGHT CONTAGIOUS

interesting report from one of these schools appears on page 14.

By W. H. Bates, M. D.

The question of whether or not errors of refraction are hereditary is one about which the medical profession has exercised itself greatly. An immense amount of work has been done for the purpose of throwing light upon it, and all the time the very plain fact that these conditions are contagious has escaped observation. For an error of refraction is simply a nervous condition, and there is nothing more contagious than nervousness. A person with myopia, hypermetropia, or astigmatism, is a person under a strain. This strain shows in his voice, his walk, his manner, and makes the people with whom he comes in contact nervous. These people then develop errors of refraction, temporarily if the influence is temporary, and permanently if the influence is permanent, as in the case of children who cannot escape from their nervous teachers and parents. Endless illustrations of this fact could be given. A few must suffice.

A very nervous woman wearing glasses for astigmatism brought me her very nervous child who had been wearing glasses for six months, also for astigmatism, three diopters in one eye and three and a half in the other. The child's eyes were red, strained, and partly closed, and it was quite evident that the glasses did not make her comfortable. I talked to her pleasantly for a while so as to disarm any fears of the doctor that she might entertain, and then told her to close her eyes and rest them for fifteen minutes. When she opened them she had perfect sight for the Snellen test card in both eyes, and she read diamond type at from six inches to eighteen. I said to the mother:

"There is nothing wrong with your child's eyes. When they were tested she must have been nervous."

The mother answered that this was true. She had been trying to play a duet with her sister, and got so nervous that she could not see the notes. The family was so alarmed at this sudden failure of sight that site was taken immediately to an oculist, and the result was glasses for astigmatism. As children have an astonishing power of adapting their eyes to different kinds of lenses, she had adapted her eyes to these very strong glasses sufficiently so that she could see through them, but was not able to be comfortable in them, nor in any of the others that were subsequently given to her. Mother and child left the office in a very happy frame of mind, but a few days later the mother returned, very much discouraged and somewhat incensed. The child was just as had as ever, she said. She couldn't read half the card.

"The reason she can't read the card," I said, "is because you test her. Let her younger sister test her, and you will find that she will read it perfectly. The strain in your eyes is reflected in your voice and walk, in everything about you; you make the child nervous, and when you try to test her sight she becomes astigmatic. If you want her to get cured and stay cured, you should get cured yourself."

She took my advice, and is now under treatment.

In my studies of the eyesight of school children this experience was frequently repeated. When I went into a classroom where the teacher wore glasses I knew I would always find a large percentage of imperfect sigh. When the teacher did not wear glasses I knew the percentage would he below the average. When the teacher tested the sight of a child it was often found to he very imperfect, but when I tested it it might be perfect. In one case a teacher wearing glasses told me that a certain boy was very nearsighted. He could not read writing on the blackboard, he could not tell the time by the clock, and he could not recognize people across the street. I tested his sight and found it normal. The teacher was incredulous and suggested that he must have memorized the letters. Then I wrote letters and words on the blackboard which he read just as well as he had read the letters on the card.

One day my own children came home from school with a note to the effect that they could not read the writing on the blackboard and needed glasses, and later a nurse called to reinforce the message. I tested their sight and found it normal. Then I called on the principal, told him that I was an eye specialist, and after testing the sight of the children I could find nothing wrong with it. I asked if there would be any objection to their having a test card in their classrooms so that they could read it frequently. He said he could see no reason why this should not be done, and it was. But soon after the younger child, a little girl, came home from school in tears. The teacher and the nurse and the other children had made fun of the card, and said it was absurd to suppose that such a simple thing as reading it every day could keep one from having trouble with one's eyes. Of course I knew it could do her no good to read the card under these conditions, and so I had her read it at home. The sight of both children has remained perfect, but I have no doubt that if the circumstances had been different they would have been wearing glasses to-day.

Children are very sensitive to nervous influences, these influences often produce temporary imperfect sight, and unfortunately they are often, in these states, fitted with glasses. Fortunately most children hate to wear glasses, and after trying them for a while frequently discard them. They also break and lose them. Thus they are saved much injury. But if the teacher or parent is conscientious and insists on the wearing of the glasses, and on their renewal when lost or broken, the temporary error of refraction becomes a permanent one.

The atmosphere of the average schoolroom is extremely irritating. It makes the children nearsighted, farsighted and astigmatic. But if they have a familiar Snellen test card which they can read every day they are always able to overcome this adverse influence. When they can read the letters on the test card which they know by heart, they are also able to read the writing on the blackboard and see other strange objects at the distance or the near-point with normal sight.

# STORIES FROM THE CLINIC

A great many children visit our clinic. Some are sent by their teachers, or the school nurse. Others hear from their friends that we cure people without glasses and come of their own accord. They are a most interesting class of patients; for they respond so quickly to treatment that one's work becomes a succession of thrills, and as a rule they are very grateful for what we do for them.

Grown people are often annoyed when they find that we do not prescribe glasses, but the children, with rare exceptions, are delighted, for they usually hate to wear glasses. Only occasionally do they insist that they must have them, because the teacher or the nurse said so. Before they leave the clinic, however, they are always convinced that whoever told them they needed glasses made a mistake

One day a colored girl tried to work me for a pair of glasses. Dr. Bates, after examining her eyes, turned her over to me with the remark that she would be an easy case. I placed her at ten feet from the card and asked her to read what she could. She said she could not read anything. I brought her to within one foot of it, and she still insisted that she could not see a letter. It occurred to me that perhaps she did not know the letters, but she said she did. I told her to palm for a while, and then I tried her again at ten feet. She looked very mournful, and said, "I can't see." Then I realized at last what was the matter with her.

"Well, if you want glasses," I said, "you will have to go elsewhere, we do not give glasses here."

I never saw a patient's sight improve as quickly as hers did now. She started at once to read the test card, and went right down to the bottom, missing only two letters on the last line.

In most cases the children, after they are cured, prove to be enthusiastic missionaries in the cause of better eyesight. On the same day that I cured the case just mentioned another colored girl, ten years old, who was as anxious to be cured as the other one had been to avoid it, came to the clinic. The school nurse had sent her to get glasses, but she said:

"I just hate glasses and I won't wear them."

I improved her sight in ten minutes from 15/70 to 15/30, and the next clinic day she brought with her fourteen other children and the school nurse, all colored, including the nurse, who was a mulatto. That was a thrilling day at the clinic. The nurse was thrilled and I was thrilled, for in an hour's time I improved the sight of every one of those children from about 15/50 to 15/20.

The first child I treated, was very cross, and did not wish to be annoyed by palming or anything else. The nurse explained to me that she was a very nervous child and never still a minute.

"That doesn't matter," I said; "I'm not going to make her nervous,"

I then asked the child what her name was, and she told that it was Helen.

"Now Helen." I said, "the first thing you are going to do for me is to smile," which she did.

"Now I wonder if you can read that test card for me?" I asked.

"Oh, sure," she replied. "I'm not a baby!"

She read 15/50.

"Be a nice girl now and cover your closed eves with tour palms," and I showed her how to do it.

She followed my instructions, and by alternately flashing the letters and palming, her vision rapidly improved to 15/20.

The next girl was one of the prettiest mulattos I have ever seen. She had closely watched Helen, and from the look on her face I could see that she would be more ready to do as I wished her to do than Helen had been. Her name was Clarice, and her vision was about the same as Helen's, namely 15/50. I told her to palmin, and while she was doing this I went to the next patient, a girl who reminded me of Topsy in Uncle Tom's Cabin, for her head was just covered with pigtails. After I had started her to palming, I went back to Clarice, and found that she could now read 15/20. And so it went through the whole fourteen. The nurse asked me a great many questions about the treatment, and said she would treat the children the same way at school. At a later date she came to me again for more instructions, and said that so far she had been getting such good results that she had not found it necessary to send any more of her charges to the clinic. She studied Better Eyesight very carefully and found that it enabled her to give the treatment correctly. Clarice and Helen also came back, not because it was necessary, since they and the other children were doing so well under the instructions of the nurse, but because they liked to come. After palming for a short time both of them became able to read 15/10.

The influence of the school in producing imperfect sight is sometimes startlingly illustrated by these child patients. A dear little blue-eyed girl of twelve who came to us because she had severe headaches seemed to be suffering mainly from fear of her teacher. In the morning before school she felt perfectly well; after playing in the street with the other children she also felt well; but when she went into her classroom and began work her head began to ache. It also ached when she was doing her home work, but not so badly. I asked her to read the test card at twelve feet, and unconsciously I raised my voice a little. Immediately I saw her start as if someone had scared the very life out of her. I guessed at once just what was the matter, and lowering my voice I told her as gently as possible that there was nothing to be frightened about.

"What you are not able to read on that card today, you will read next time," I said.

Then I showed her how to palm and left her for a time, as there were many other children waiting to he treated. Coming back in fifteen minutes I told her to take her hands down and tell me what she could read; and I made my voice as low as I could, not much above a whisper. At once, with each eye she read 15/10, more than normal vision, and she said she had no pain. I asked her if she could guess how many children there were in her class.

"Yes, about sixty," she replied.

"My," I said, "if your poor mother had sixty children, wouldn't she be nervous and worried! And wouldn't you want to help her all you could! Suppose you make believe the teacher is your mother, and try to help her all you can."

This had a great effect on her. The next time she came her attitude toward her teacher seemed to have completely changed, and at every subsequent visit she always had something to say about her wonderful teacher. I feel sure that her fear of her teacher had been unnecessary, and also that it had had much to do with her condition. She had little trouble with the headaches after her first visit, for when she felt one coming on, as sometimes happened when she had a hard example to do, she was able to get quick relief simply by closing her eyes.

While the work with the children is always thrilling, we sometimes have a case that is so wonderful that it stands out from all the others. A boy of ten came to us one day in a very had condition. He did not want to look at anyone, and did not even want to raise his head, because the light bothered him so. After testing his sight and finding it to be about 15/70 I placed him on a stool, which, by the way, is a very precious piece of furniture in the clinic. All our poor patients have to stand while they palm and practice with the test card. No comfortable chairs for them. But most of them are willing to do anything so that they may not need glasses, and they do not complain. For this boy, however, I was able to find a stool on which he could sit while he palmed. I told him not to open his eyes for a moment, and after I had attended to a few patients I came back and asked him to take his hands from his eyes. What happened then seemed like a miracle. He didn't look like the same boy. His formerly half-shut eyes were wide open, and without any trouble he read the bottom line of the test card at fifteen feet. When I praised him for what he had done he smiled and said:

At the next visit he read 20/10 with both eyes, and he told me that when the light bothered him he closed his eyes and covered them with the palms of his hands, and in a few minutes he was all right.

This boy brought a friend, aged twelve, who had been wearing glasses for two years of more. When he came into the room he did not wait for his turn (I guess he never thought about it in his eagerness), but placed himself right in front of me, took off his glasses, and said:

"You cured Jimmie's eyes. Will you cure me, too?"

"Surely," I said, "if you wait your turn," and as soon as I could I tested his sight.

I found that he could see just as well without his glasses as with them—15/20. So I asked Dr. hates to examine him and his glasses, and it turned out that he was wearing far-sighted glasses for near-sight. I told him to palm, and before he left the clinic that day he saw distinctly some of the letters on the bottom line at fifteen feet. This was an even more remarkable cure than Jimmie's, for patients who have worn glasses are usually much harder to cure than those who have never worn them.

Sometimes the mothers come with the children, and then I always try to enlist them as my assistants, and if they wear glasses I try to persuade them to cure themselves, so that the children will not copy their had visual habits, and will not be subjected to the influence of people who strain. Not long ago a mother who had trouble with her eyes brought a child for treatment, and said that she would help the latter at home. I said that would he fine, and then I asked the child to help me cure her mother.

"After mother has given you a treatment," I said, "tell her to close her eyes and cover them with the palms of her hands, and to stay so until everything is black. Be very quiet so that she will not he disturbed, and when she opens her eyes you will surely find that she can see better."

Both mother and child made rapid progress. At the first visit the child's vision, which had been 15/50, improved to 15/30, and in six weeks it became 20/15. The mother now exhibits to her friends, with much pride, her ability to thread a needle without glasses.

Only one thing about this work with the children makes me sad and that is, we can do so little of it. Many children come from other districts, and are, of course, turned away by the dispensary clerk. But even if the hospital rules did not require him to do this, we could not admit all who come. There is a limit to the number we can treat, and there is so little space in our little eye room that already we are obliged to treat the overflow in the outside general waiting room. I wish that there could be such clinics in every hospital, and that the teachers and the nurses in the schools could be instructed in the very simple art of preserving the eyesight of the coming generation.

## THE SNELLEN TEST CARD IN NEWTON

By U. G. Wheeler

Superintendent School Department, Newton, Mass.

We are greatly indebted to Superintendent Wheeler for sending us the following report of the use of the Snellen test card in one of the public schools of Newton, and we hope that the success which attended his experiment Will encourage outer schools to try this method of preventing and curing imperfect sight in school children.

Last fall we purchased several copies of the school number of Better Eyesight, and have been trying the suggested method for the prevention and cure of imperfect sight in one building in the city. The following is a copy of the report I received at the end of the school year from the principal of that school regarding the result of this trial:

In the fourth grade the teacher began using the Snellen eye chart last October. There was one case where the child tested very low in one eye. One of the children in the grade worked with her four times a day as was suggested in the booklet. The child lost the fear of using her eye, and after some time could read the card fifteen feet away. At that time her mother requested that we do no more work with her, as the oculist was afraid that she might strain her eyes.

The class as a whole used the card for months. Their eyes seem to he strengthened by the constant use of it.

In the fifth grade the teacher used the card with her class and gained definite results. One interesting case was that of a girl who had trouble with her eyes. It seemed to be hereditary, as the father had the same trouble. The girl used the Snellen test card and finally was able to read it across the room. If she neglected to practice for a few days, she found it necessary to begin all over again. There was no chance fur memorizing the card, as the teacher cut letters from newspapers and used them while testing her, and found that she had been helped a great deal. It is thought the children's eyes were really strengthened.

In the other grades—I, II, VI, VII and VIII—the card was used, and in some cases it helped; in others the eye defects were too serious. However, the teachers believe that if the card is put to the right use wonderful results may be reaped.

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