

## June 1922

Better Eyesight

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

June, 1922

DISCARD GLASSES

EASY to say, something else to do. But it is a fact that no one can be cured without glasses and wear glasses at the same time.

This is a fact that one should keep in mind. It may help to give one backbone sufficient to do the right thing. I know how difficult it is from personal experience. I suppose I have as much originality, if not more, than the average person. It required a year before I was convinced that my eyes could not be cured unless I stopped wearing glasses. I could not wear them even for emergencies without suffering a relapse.

Patients who are really anxious to be cured can discard glasses and obtain benefit almost from the start. Wearing of glasses becomes a fixed habit. The idea of going without them is a shock. The honest determination to do all that is possible to be done for a cure, makes it easy or easier to discard glasses at once. Patients tell me that after they have discarded their glasses for a few days they do not feel as uncomfortable as they expected.

Do not use opera glasses. Do not use a magnifying glass for any purpose.

It is very natural that one should hesitate to discard glasses after he has worn them for many years and obtained what seems considerable benefit. It may help to read what I have published about glasses. Most of the discomforts of the eyes are largely functional or nervous and not due to any real or organic trouble with the eyes. All the symptoms of discomfort are accompanied by a strain which produces a wrong focus of the eyes called myopia, hypermetropia, astigmatism or presbyopia. Glasses may correct the wrong focus produced by the strain, but they do not always, because the eyes are not always strained to fit glasses accurately. While wearing glasses in order to see, one has to strain or, by an effort, squeeze the eye ball out of shape and it is impossible therefore, to obtain relaxation and see with glasses.

If one can understand what I have just stated one can realize the necessity of discarding glasses in order to obtain a cure. I feel that the facts should be emphasized and the patient made to understand the necessity of discarding glasses. This makes it easier for the patient to do without glasses.

Do not argue with yourself about the matter. When you go to a doctor you expect to take his medicine even though you may not know what it is or how it is going to act. When patients come to me for relief I say, "Discard your glasses and you can be cured."

If they are wise they do as I say without any talk.

THE LEAGUE FOR BETTER EYESIGHT

What the League has already done—what you can help it do besides.

THE time of meeting of the next meeting of Better Eyesight League is being changed to evening, to permit a greater attendance. The third monthly meeting will be held in Room 504, 300 Madison Avenue, New York City, at 8 P. M., Tuesday, June 13th.

It takes any organization a short while to become effective in action. The League has proved itself no exception, but it can truly be said that its period of gesturing is over and its day of actual accomplishment already begun. And this with the League only three months old.

Up to the present the most effective work of the League has been done between its monthly meetings, through the mails. In a small, but an ambitious way the League has already begun its work of education of the public.

Its membership has increased slightly, due to this activity.

A number of persons previously without the knowledge of the new science of the eye have become definitely interested in it as a result of the League.

Some 500 persons, both adults and children, in need of better vision, have been acquainted with the existence of the League and with the availability of the new methods for obtaining and retaining better vision.

Convincingly worded, attractively printed and attention-commanding correspondence cards have been supplied to members of the League for use in their personal correspondence, telling in less than five hundred words the great fact of the development of the new ophthalmology. This correspondence card, "About Your Eyes," is from the pen of Mrs. Mable Potter Daggett, a noted magazine contributor.

The preparation of educational literature to go to school teachers throughout the country and to mill and factory superintendents in industries where vocational eye strain is common is under way.

A list of possible speakers for the League is being made up.

At the last meeting, in accordance with the constitution, Mr. Ross Varney was chosen to be President of the League for the balance of its first year, Miss Rose O'Neil, previously elected, having found it impossible to devote the necessary time. Mr. Varney is both enthusiastic and competent, and is giving to the League a high type of unselfish executive force.

Similarly, the previously elected Vice President having found it impossible to serve properly, the League at the last meeting elected Miss Portia Creed Vice President for the remainder of this first year. Miss Creed's ability and zeal are outstanding.

The meetings of the League may be compared to an exclamation point at the end of a paragraph of action. They are the periodical accent of emphasis to the continuously carried-on work of the League. The stronger each exclamation point of interest and enthusiasm, the more emphatic becomes the steady routine work of the succeeding month.

It is in many ways a notable intellectual group that is comprised in the League membership, it is a very forceful group, to be a part of which is a distinction. Already this group is growing. It is going to widen more and more.

Every reader of the magazine should come and find out for himself the spirit of the League and the work it has under way, by attending the next monthly meeting June 13th.

SOME ANIMALS' EYES

The experimental detail into which Dr. Bates has gone in his development of the new science of ophthalmology is realized by few persons, although readers of his book. "The Cure of Imperfect Sight by Treatment Without Glasses," have some appreciation of this. This article tells some of the incidents and discoveries of his long series of experiments, some significant to science, some humorous as well.

Turtles

THE turtle has an unusual power of changing the focus of the eye. A physician who taught in a medical college told me that every year he would remove the eye of a turtle and demonstrate that stimulating the ciliary muscle with electricity produced accommodation by altering the front surface of the lens. He had been doing this for many years.

He was a good-natured person and I asked him if he would demonstrate the facts to me, which he kindly consented to do. After removing the eye of a turtle he fastened it on a piece of cork with the help of several pins. He then told me to note that when he stimulated the eye with electricity I could see the lens change its form, with the aid of a magnifying glass. I followed his instructions carefully and told him that I did not see the lens move but I did see a considerable agitation of the iris. With the aid of the retinoscope I found that with a strong stimulation of the eye by electricity there was no change in the focus. The doctor was able to demonstrate the same thing with my retinoscope.

During all these years the commotion produced in the iris was wrongly supposed to be associated with a change in the shape of the front part of the lens. In the other eye, having demonstrated by simultaneous retinoscopy that the lens of the turtle did not produce a change in the focus of the turtle's eye I proceeded to demonstrate that the oblique muscle was a necessary factor in accommodation. I exposed the superior oblique muscle, which is of considerable size in the eye of the turtle. When this muscle was stimulated with electricity the doctor and I both demonstrated with the aid of the retinoscope that the eye was accommodated to a high degree.

I then cut the superior oblique muscle, when I was able to demonstrate with the retinoscope that electric stimulation of the eyeball produced no change in the focussing power of the eye. The doctor agreed with me.

Then I sewed the divided ends of the oblique muscle together again. Now the electric stimulation produced the same change in the focus as in the beginning. The eye was accommodated for the near point.

The doctor confirmed my observation. He said before he left that he was convinced that when it came to turtles Helmholtz was wrong and that all these years he had been teaching an error and would in the future omit the experiment on the eyes of turtles.

Bears

One night about ten o'clock I was testing the eyes of animals in Central Park. The watchman had kindly loaned me a lantern for my use. This lantern I placed on a stone coping which surrounded a den of bears. When possible I flashed the light from the retinoscope into their eyes and found that they were normal. When I was about to leave I started to pick up the lantern and suddenly out of the dark a bear sprang forward against the rail, poked his paw between the bars and tried to grab the light. I was so startled I jumped back in great fright. The bear seemed interested and amused, he opened his mouth and if ever a bear laughed silently he did. I am sure there was nothing wrong with his sight.

Monkeys

After examining a number of monkeys I found by simultaneous retinoscopy, some who were myopic. Usually when I examined the eyes of tigers, leopards or lions I was careful to do so at a respectful distance, but the monkeys seemed so very playful and good-natured that it did not seem necessary for me to take any precautions. While I was trying, with the help of the keeper, to get a view of the eyes of an old lady sitting up on a roost, a monkey in the adjoining cage grabbed me by the hair and produced a lot of joy among his fellows at my expense. It was so unexpected and the pull so strong that I do not believe I shall ever forget the experience, although I was more frightened than hurt. The keeper laughed louder than a lion's roar.

Wolves

A great many wolves were examined by simultaneous retinoscopy and in all cases their eyes were found to be unusually good. One night a policeman stopped me and asked in a very disagreeable tone of voice what I was doing among the animals. I explained to him that I was very much interested in finding a method of preventing myopia in school children and that facts obtained from studying the eyes of animals were a great help. Well, he softened right away, and was kind enough to hold the lantern for me while I made further observations.

Leopards

It seems a safe procedure to stand in front of a cage ten or twenty feet away and flash the light of a lantern into the eyes of some wild animal, but in one case a tragedy seemed imminent. The keeper was helping me all he knew how by coaxing the animals into a position that was favorable for me to examine their eyes. He went into a cage where he thought no animal was present, in order to reach another cage that contained some leopards. Suddenly there came out from a shadow into the light another leopard, and the speed with which that keeper got out of that cage was wonderful. And he was none too soon, because the door slammed shut against the very teeth of the animal. I was able to examine the eyes of this leopard while he was annoyed and found his eyes were normal.

Other Animals, and Fish

None of the members of the cat tribe which I have examined with the retinoscope was near sighted. One of the lions had a cataract. A hippopotamus also had a cataract. Old Jewel, an elephant I examined, was near sighted. The distance of the eyes of the elephant from the ground may be six feet or more, and I am quite sure that this elephant did not become near sighted from straining to see near objects. I found some buffaloes near sighted and some other animals, also. No birds were found near sighted. At the New York Aquarium I examined many thousands of eyes of fish and found none near sighted. The ability of fish to focus their eyes for a very near point is wonderful. The muscles found in the eyeballs of fish are very large. Electrical stimulation produces a high degree of accommodation or focussing at the near point, except in the eyes of the shark family. These fish have no superior oblique muscle; but, when I placed a suture of strong silk thread in the place occupied by the oblique muscles in other fish, electrical stimulation produced accommodation in the eyes of all the shark family.

It is interesting to report that the cat family does not focus its eyes to see near-by. Electrical stimulation always, in my experiments, has produced near focus in the cat family, but only after a silk thread was inserted in the place usually occupied by the superior oblique muscle.

THE PARTY

By Emily C. Lierman

If there is any pleasure keener than that of giving pleasure and comfort to a child the great teachers and-philosophers of history as well as the ordinary man and woman has never found it out. It is the great privilege of Mrs. Lierman not only to be constantly advancing the knowledge of the new science of the eye, but at the same time to be giving weekly service and comfort to many of God's children.

IN the February number of Better Eyesight I wrote about sixteen school children who were sent to us for treatment of their eyes [link]. Children with imperfect sight are usually sent from the schools to us to be fitted for glasses. But all of these girls wore glasses, with the exception of two. The teacher of these children wore glasses, and they were surprised when she appeared one day without them. They all wondered how she could possibly see for she had a very high degree of near-sightedness.

In my article I wrote about the children's misbehavior and the trouble we had with them at the clinic. As they acted like wild Indians I became more determined to cure them and began to plan very quickly in my mind just what I would like to do for them if they would only behave in the clinic room and allow me to benefit their eyes. So a house party was promised to all whose sight improved to 20/20.

Little did I think that day in February that so many of them would obtain perfect sight so soon. But Saturday, April 22nd, the party was held at our afternoon downtown offices in New York City.

When school children discover that they can be cured without glasses we have very little trouble treating them because they are always anxious to be cured, with a few exceptions, of course. The exceptions are generally colored children who would feel much more dressed up with eyeglasses on. Their elders, especially fathers, are seen standing about on the street corners in the vicinity of the Harlem Hospital, where Dr. Bates' busy clinic is. They are very much dressed up in flashy clothes, with near diamond studs and shiny patent leather shoes. They delight in wearing eyeglasses with

attractive rims of gold or tortoise shell.

I remember about six years ago as Dr. Bates and I passed by some of these people on the street near the hospital, he remarked, "I wish I had some of the dignity of these colored people; I wonder where they get an the money to dress so well."

Sometimes they come to us to have their eyeglasses readjusted and the doctor finds that their glasses are practically window pane glass. So it is no wonder that their children crave eyeglasses to be attractive also. It does not take a very long time, however, to discourage a colored boy about wearing glasses. I just start talking about baseball and other games where eyeglasses would be troublesome and that is all that is necessary. In a very short time he has normal sight if he practices the method faithfully.

#### The Frolic of the Thirteen

We spent an hour at the clinic before the party and when we arrived a surprise was awaiting us. Thirteen kiddies were all arrayed in their Sunday best and two of them presented us with bouquets of roses and carnations. They came from grateful mothers and I am certain that it meant a great sacrifice to them. The coming event must have had a good effect upon their sight for twelve of them read 20/20 with each eye separately on strange cards.

Three of the sixteen were not there. One of them stayed away because she had put her glasses on again. Her teacher informed me that she did not do so well in her studies nor with her reading on the blackboard after she had put her glasses on again. I was sorry about this because when the girl took off her glasses she was immediately benefited by the treatment and soon obtained normal sight. She became more accurate in all her studies. It was a comfort to her to see better at the distance without her glasses than she ever saw with them. I was told that previously while wearing her glasses she read figures incorrectly and usually made serious mistakes. The school nurse had visited her mother and threatened to make trouble for her if the glasses were not put on the child again. This particular girl was one of the most nervous and unruly of any girl patient I ever had. She worried her school teacher because she found it hard to be truthful. During her treatment Dr. Bates and I noticed that as her vision improved, she became less nervous and her teacher said there was a marked improvement in her conduct in school. She is coming back again for treatment as her father refuses to keep glasses on her.

After clinic was over, two taxicabs drove the kiddies with the doctor and myself through the East Drive of Central Park. The flowers were budding here and there and it was like a moving picture show to watch the kiddies. One of them asked me if skunk cabbage grew in the park and who feeds the squirrels in the winter time. One of my little charges has never been to the country. The party was a decided success.

Right in the midst of our fun, though, two persons called for an interview with Dr. Bates. There he was, a boy all over again, playing parlor games and laughing heartily with the kiddies as though he had not a care in the world. I allowed the visitors who came such a long distance to see him, to have only five minutes of his time, otherwise it would have been a great disappointment to him to be denied the company of the kiddies. A game of forfeits was played and when Dr. Bates was called upon to forfeit something he gave his retinoscope. It was held over the head of the kneeling child, who was the arbiter of the fate of the owner.

"What should the owner do to redeem it?" was asked, and the answer was: "The owner must go to the next room and read the Snellen Test Card from top to bottom without a mistake." The doctor promptly did this, while two of the children went with him to see that it was read correctly.

I could go on telling more of the funny things that happened on that wonderful occasion, but there would not be space enough, but I would like to add that the children said as they filed out of the room: "Thank you for the party, but thank you most of all, Dr. Bates, for joining us in the fun." t

I would like to say also that I have discovered that Dr. Bates is very fond of ice-cream. I can prove it because he did not refuse the third helping.

#### QUESTIONS AND ANSWERS

Q. When the memory is perfect the sight is also perfect? An eminent musician in Boston has a phenomenal memory for music but is so near-sighted that without glasses he could not see to find his way.

A. He sees music perfectly.

Q. You have said that imagining sensations of feeling, tasting, smelling, etc., are as effective as seeing in perfecting the eyesight. I know of a Professor of Psychology who is an expert in the field of smell. She has a remarkable ability to imagine odors, as I have heard her testify many times. She is so near-sighted that she has to have an attendant when she walks. I don't remember any definite statement as to her visual memory except that I remember her remarking that when she heard a name she always by some power of association saw distinctly some color. Her memory in other respects also seems far above the average. How would you account for her near-sightedness?

A. Strain to see.

Q. "The cause of this loss of function in the center of sight is mental strain and as all abnormal conditions of the eyes, organic as well as functional, are accompanied by mental strain, all such conditions must necessarily be accompanied by loss of central fixation."—"Better Eyesight," page 8, July, 1919 [link]. Why is this necessarily true if as you say on pages 8 and 9 of the same magazine different strain produces eccentric fixation from that strain which produces, for example, myopia.

A. Imperfect sight is always accompanied by loss of central fixation.

Q. In visualizing a black period what background should one see?

A. Not important.

Q. How would you explain by your theory this experience? A friend of mine who has far-sighted astigmatism for which she is wearing glasses, when working under pressure and with considerable nervous strain has no trouble with her eyes, but upon completely relaxing during a vacation period is troubled with smarting and aching of the eyes.

A. Strain, not relaxed.

Q. "It is true that every motion of the eye produces an error of refraction but when the movement is short this is very slight and usually the shifts are so rapid that the error does not last long enough to be detected by the retinoscope, its existence being demonstrable only by reducing the rapidity of the movement to less than four or five a second. The period during which the eye is at rest is much longer than that during which an error of refraction is produced."—"Better Eyesight," December, 1919, page 1 [link]. I do not understand the italicized statement. You have said that the normal eye is continually shifting. If every motion of the eye or the object of vision ("Perfect Sight Without Glasses"), page 107 [link], produces an error of refraction how advise reading in a moving vehicle, or attending a moving picture show?

A. Moving pictures do not move when seen. Reading in a moving vehicle is common as the page may be stationary with the eye.

Third Monthly Meeting  
BETTER EYESIGHT LEAGUE  
8:00 P. M., JUNE 13th  
Room 405  
300 MADISON AVENUE NEW YORK CITY

Doctors are needed all over the world to cure people without glasses.

Previous Issue  
TTTTTTTTTgPst Issue  
TTTTTTTTTW To Contents Page