



Through this the fluids of the interior escape. Like iridectomy this operation sometimes succeeds temporarily, but, according to Elliott himself, it may fail to check the optic atrophy and decline of vision even when the relief of tension is complete.

Although it is the consensus of medical opinion that a glaucomatous eye must eventually be operated upon, and that the sooner this is done the better, some men have attempted to hold the process at bay by the use of myotics. These drugs, by contracting the pupil and thus stretching the iris, are believed to draw the latter away from the "filtration angle" and allow the excess of fluid to escape. They are commonly employed for the purpose of giving temporary relief, but some specialists advise their continuous use. Posey claims that such treatment gives a larger proportion of successes than iridectomy.

Until a few years ago I always treated glaucoma by the old methods, not knowing anything better to do; but I never used the Elliot operation, having early learned that it is very dangerous to allow the fluids of the eyeball to escape, and having seen glaucoma produced by fistula of the cornea. I would not have ventured to predict that the condition could be relieved by relaxation, and only learned by accident that it was amenable to such treatment.

On May 9, 1915, a patient (mentioned in *Blindness Relieved by a New Method*, N. Y. Med. Jour. Feb. 3, 1917) came to me with a complication of diseases which had reduced the vision of the right eye to light perception and that of the left to 20/100 (the field being also contracted). She was fifty-four years of age, and had been wearing since 1910 the following glasses: both eyes, convex 2.00 D.S. combined with convex 1.50 D.C., axis 90. As her pupils were much contracted, I prescribed atropine to dilate them, two grains to an ounce of normal salt solution, one drop three times a day.

On the afternoon of May 10, she had an attack of acute glaucoma in the left or better eye. As atropine and other mydriatics are thought sometimes to produce glaucoma, the fact that the disease attacked only one eye and that the better of the two is interesting. The condition got worse as the day advanced, and during the night the pain was so intense that the patient vomited repeatedly. The next morning she came to the office, and I noted that there was blood in the anterior chamber. The vision had been reduced to light perception, and the pain again produced vomiting. I prescribed eserine—two grains to the ounce, one drop three times a day. Afterward I visited her three or four times a day in her home, and as there had been no improvement, I increased the strength of the eserine solution to four grains to the ounce and alternated it with a three per cent solution of pilocarpine, both of these drugs being myotics. Still there was no improvement, and after a few days I decided upon an operation. It was performed on May 15, and was accompanied by considerable hemorrhage. Mild hemorrhages also occurred at different times during the following week. When the blood cleared away an opaque mass was left covering the pupil. On May 23, the tension was normal and there was no pain; but, owing to the opaque matter covering the pupil, there had been no improvement in the vision.

#### Palming helps cure Glaucoma

After the operation the patient resumed the relaxation treatment. Under its influence the vision of the right eye improved, and when a few weeks after the operation there was an increase of tension in this eye, it was at once relieved by palming. For some months the vision of the left eye remained unchanged, owing to the opacity of the pupil. Then the obstruction began to clear away, and the vision improved. In a year there was normal vision in both eyes. From time to time during this period, and up to the present time, the patient had attacks of increased tension in both eyes; but they were always relieved in a few minutes by palming.

Since then I have used the same treatment in many cases, and I have never seen one in which the pain and tension could not be relieved in a few minutes by palming, while permanent relief was obtained by more prolonged treatment.

One of the worst cases of glaucoma I ever met with came to me on Feb. 2, 1920. The patient was sixty years of age, and his vision in the right eye or better eye was only 20/100, with marked contraction of the field on the nasal side. In the left he had only light perception. The eyeballs felt as hard as the glass shell of an artificial eye, which, technically, is tension plus 3. The glaucomatous excavation of the optic nerve was so marked that it seemed as if the whole nerve had been pushed backward. The patient had been under treatment a long time, but had received no benefit.

On March 2, after swinging and palming, the vision of the right eye was 20/20w—while that of the left was 20/100 in the eccentric field. On March 4, the field of the left eye had improved, and by alternating the universal swing with palming he became able, for short periods, to read diamond type with the right eye at six inches. This was twelve days after he had begun the treatment. On March 7, he flashed 20/40 with the left eye, and by the aid of the universal swing read fine print at five inches with the right, while the field of both eyes was normal. For the first time in several years he became able to see the food on his plate. Previously he had had to be fed, which was very humiliating to him. He also became able to go about without an attendant, to attend to his correspondence at the office, and to read his letters without glasses. At this point he stopped the treatment against my advice, and I have not seen him since. He was greatly helped by the universal swing, which he practiced all day.

The truth about glaucoma is that it is a functional neurosis caused by strain, and as such is curable. You can produce hardness in a normal eye by having the patient strain to see (see page 2), and you can soften a glaucomatous eyeball by relief of strain. These changes are so rapid that no change in the contents of the eyeball could account for them. I therefore concluded, before I had any experimental evidence of the fact, that they were due to muscular action. Later I was able to produce glaucoma in a rabbit's eye by operations upon the muscles. I shortened the superior rectus by tucking, and thereby produced a tension of plus 1. I repeated the operation upon the superior oblique, and the tension increased to plus 2. I did the same to the inferior oblique, and the tension increased to the maximum, plus 3. All this time the tension of the other eyeball remained normal.

## **GETTING CURED OF GLAUCOMA** **By F. C. STEWART**

This patient when first seen was able to read 20/50 with each eye, but the right eye was absolutely blind on the nasal side, a vertical line dividing the seeing from the blind area. The tension of the right eye was usually greater than that of the left, but at times the reverse was the case, and for short periods the tension of both eyes was normal. He had been using myotics (drops which contract the pupil) for some time, but had obtained no benefit from them. His age was fifty-eight, and he was wearing the following glasses: distance, both eyes, convex 2.75 D.S.; reading, both eyes, convex 5.00 DS. The improvement in his field since he has been under treatment has been very remarkable, as the accepted methods of treatment, even when the results are most favorable are not expected to enlarge the field, or even to prevent a further loss.

In the summer of 1917 I had the first symptoms of glaucoma in the form of an attack of rainbow vision. I did not know what the symptoms meant, and was not alarmed; but I went to an optician and had my glasses changed, thinking the trouble was the consequence of eyestrain. The symptoms continued, however, and I went to another optician and had the glasses changed again. Still I was no better. Then I went to a succession of oculists, some six or seven, all of them being men of considerable eminence in the profession. The first two put drops in my eyes and examined my field, but did not tell me that I had glaucoma. It was only from the third, about a year and a half after the first symptoms appeared, that I learned what was the matter with me. The last began to talk operation, but I let him talk. I think I may claim to be as game as anyone about operations. When the doctors told me that they wanted to take my stomach out and put it back again, I said, "Go ahead." If they had told me that they wanted to take off my leg, I would probably have said the same thing. But when it came to letting anyone cut into my eye it was a different matter. About the first of last July the oculist in whose care I then was told me that my field was getting less. He asked me to come back in October, and said if the field continued to contract he would talk operation again.

Sometime previous to this an acquaintance who said that Dr. Bates had cured him of glaucoma gave me a copy of *Better Eyesight*. I did not become seriously interested at the time, but later I asked the man for details. He told me something about Dr. Bates' methods, and said he not only had great faith in Dr. Bates, but that he was the only eye specialist in whom he did have any faith.

Finally, on September 11, of this year, I went to Dr. Bates. He told me to stop the eye drops and take off my glasses, which I did. Having worn the latter for twenty-five years, I had considerable difficulty at first in getting on without them; but after three or four days things began to go better, and before the end of the month I read the address on the Doctor's card without artificial aid. I could not have done this when I took off my glasses if a hundred million dollars had been at stake. I can now, six weeks after the beginning of the treatment, read ordinary print at twelve inches, and under favorable conditions can read diamond type at six inches or less. There has also been a considerable improvement in my field.

My progress has been slow, but it is sure, and I see no reason why it should not continue until I get a complete cure. I have spent many hours a day palming, and this, when it is successful, softens the eyeball and improves the sight very materially. I am also able to soften the eyeball simply by a thought—that is, by the memory of some object or incident. A white cloud, the blue sky, some incident of my boyhood, or of a more recent period—anything so long as it is remembered perfectly—has this extraordinary effect. Often when I wake in the morning my eyeballs are hard, but by the aid of my memory I am always able to soften them. One morning I woke at two o'clock, and went to the bathroom. There, in accordance with a habit of mine, I washed my face in cold water. As I touched my eyeballs I was shocked to find how hard they were. They were like two rocks. Immediately I paid a mental visit to Van Cortland Park and began to examine the trees, noticing the texture of the bark, the gum oozing out of it, the outlines of the leaves, etc., and before I had reached the second tree the eyeballs were soft. Often since then I have resorted to the same expedient, and always with the same result. Fortunately I know the different kinds of trees very well, and my visits to the park are interesting as well as profitable.

On the streets and elsewhere I try to imagine that everything is moving, (the swing) and as long as I am able to do this the eyeballs remain soft. Since I have been under treatment I have been trying to learn to sleep on my back, as the Doctor says that the body is always under a strain unless the spine is straight. When I am able to do this I waken without pain or hardness in the eyeballs.

Recently I sent one of Dr. Bates' reprints to the specialist who wanted to operate on me, and he said he was much interested.

## **STORIES FROM THE CLINIC**

### **10: Absolute Glaucoma**

**By EMILY C. LIERMAN**

In absolute glaucoma there is no perception of light, and the condition is considered to be incurable. It may or may not be accompanied by pain, and in the latter case the only remedy is believed to be the enucleation, or removal of the eye. So far as the editor is aware there is no case of absolute glaucoma on record in which the pain has been relieved, or any measure of sight restored, by any method except the one described below.

A few months ago there came to the clinic a woman of seventy-nine. At first glance one could see that she was a lady, and I guessed that at one time she had been very well off. As she stood apart from the rest of the patients waiting to be attended to she took not the slightest notice of what was going on around her, and occasionally I heard her moan with pain.

When at last Dr. Bates was able to examine her he found that she had glaucoma in both eyes, and that the right was stone blind, possessing not even light perception. He turned her over to me, asking me to do what I could to help her and stop her pain. Fortunately I was able to find a stool for her, a rare thing at the clinic, and placing it before a table upon which she could rest her elbows, I showed her how to palm, which she did very readily. After a few minutes the pain ceased and the eyeballs became soft. I now told her to take down her hands, but she still kept her eyes shut. I thought this was because I had not told her to open them, but when I told her she might do so she asked:

"Are you sure the pain will not come back if I open them. For many days I have suffered such constant pain that I cannot sleep at night, and now I feel such a sense of relief that I would really like to keep my eyes closed."

"I don't think the pain will come back," I said, "and if it does you can palm again."

I now held a test card about two feet from her eyes, and told her to cover her better eye and look at the card with the blind one. We had several visiting doctors at the clinic that day, and Dr. Bates had told them about this case of absolute glaucoma. They were all standing by, with Dr. Bates himself, when I asked the patient to look at the card, and the excitement was intense when she said that she saw the large letter at the top.

"Oh, Doctor," I said, "she sees it!"

"Yes, I see it, I really see it," added the patient, scarcely able to credit her senses.

After a little more treatment I told her she must keep her eyes shut as much as possible when she was at home, and palm every minute she could get. I also told her never to look at any point more than a second, but to keep constantly shifting. She went away very happy and grateful, for the pain had not come back.

The next time she came Dr. Bates treated her, and was able to improve the vision of the right eye to 9/200, while that of the left eye improved to 9/40. He then turned her over to me again. She was very happy and wanted to talk, which I let her do. She said she was living in a furnished room and that I hadn't any idea how worried she had been about going blind, because she had no one to look after her.

"But now," she added, "I have all sorts of hopes for the relief of my trouble, because you and Dr. Bates have done so much for me. Palming helps me so much that I am now able to sleep at night. I like to do it for hours at a time, because it takes the terrible pain away."

I now told her to use her imagination to improve her sight and relieve the pain. Most of the clinic patients become confused when I ask them to do this, but this dear old lady did not find it a bit difficult. I told her to palm, and then imagine a florist's window filled with flowers. Next I told her to imagine that she had entered the shop and was observing the flowers, and I called to her mind the red rose and the white rose, the carnation, the violet and other blossoms. Then I asked her if she could imagine the green fields in the country where the daisies grow, and she said:

"Yes, and I can imagine that I am picking the daisies also."

I now told her to remove her hands from her eyes, and Dr. Bates was thrilled when she saw the T on the thirty line at ten feet. The patient herself laughed out loud and said:

"I cannot believe it."

She came to the clinic regularly, three days a week, for quite a while, and always happy because she was steadily improving. I was not prepared, therefore, to find her one day looking very much depressed. The trouble was that she had had a visitor who talked to her—or at her, I should say—for two long hours; this had upset her nerves so that the pain had returned and her vision had been lowered. I pictured to myself what it must mean

to listen to a steady stream of gossip for two hours, and my sight at once became imperfect. I told her what a dangerous thing it was for her to allow herself to be tortured in this way, and said that if her friends insisted upon talking to her for such a length of time she must keep her eyes closed as much as possible. Otherwise the strain would cause her to go blind.

For a time she got along nicely. Then I left the city for a much-needed vacation, and while I was away I got word that she was getting worse. I came back to town, and, as she was not able to come to the clinic, I called upon her.

"Oh, nurse," she said, as soon as she saw me, "my right eye pains me so that I think of nothing but death." Her thin face was lined with pain, and I could see that she was in agony. I began to talk to her about the days when she did not suffer, and how she had stopped the pain by remembering the daisies. She began to palm without my telling her to, and became able to imagine the daisy waving in the breeze. I asked her to imagine that her body was swinging with the flower. She did this, and in a few minutes her pain left her and she smiled. "Now, isn't it strange," she remarked, "but I forgot all about using my imagination."

She said that I had worked a miracle; but I explained that when she used her imagination she had to relax enough to relieve the strain in her eyes, and that had stopped the pain.

We often hear the remark, "This person makes me sick," or "That person makes me nervous," but it remained for my glaucoma patient to make me realize that these observations are literal statements of fact. All about the walls of her little room, which was very clean and sunshiny, were photographs of her children and their families. With great pride she named each one in turn, but when she came to the picture of a man and woman hanging a little apart from the rest her tone changed.

"This is my daughter," she said of the woman, and I could see that she was very fond of her, but when she pointed to the man she said:

"I cannot bear him. He makes me nervous and sick, because he is not a good man."

She began to strain at once, and had to do some palming before I left to relieve her pain. Evidently it is important, if we want to avoid eyestrain, that we should keep away from the people we dislike, and think of them as little as possible.

I called on her a few times more, and by resting her eyes between each line of letters she became able to read 10/20 with the once blind eye and 10/10 with the other. The last time I saw her she was happy and comfortable.

### **Glaucoma Number. BETTER EYESIGHT.**

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

**December, 1920.**

#### **VOLUNTARY PRODUCTION OF EYE TENSION A SAFEGUARD AGAINST GLAUCOMA.**

It is a good thing to know how to increase the tension of the eyeball voluntarily, as this enables one to avoid not only the strain that produces glaucoma, but other kinds of strain also. To do this, proceed as follows:

Put the fingers on the upper part of the eyeball while looking downward, and note its softness. Then do any one of the following things:

Try to see a letter, or other object, imperfectly, or (with the eyes either closed or open) to imagine it imperfectly.

Try to see a letter, or a number of letters, all alike at one time, or to imagine them in this way.

Try to imagine that a letter, or mental picture of a letter, is stationary.

Try to see a letter, or other object, double, or to imagine it double.

When successful the eyeball will become harder in proportion to the degree of the strain; but, as it is very difficult to see, imagine, or remember, things imperfectly, all may not be able at first to demonstrate the facts.

#### **Eyestrain During Sleep.**

Many people complain that when they awaken in the morning, they are suffering from pain in their eyes or head. They often feel as weary as though they had been working hard all night long. Many of them do not

recover from the pain and fatigue until after they have been up for an hour or longer. Their vision also may be found to be reduced to a very considerable degree. Some complain that they see illusions which are occasionally very slow in disappearing. One patient complained that the tiled floor of a bathroom had a very strange appearance; although the tiles were white, to him they appeared blue and red alternately.

A feeling of strain was always present and did not subside until the illusion had disappeared. It seemed as though the eyes were under a strain during sleep, because when the eyes were examined with the ophthalmoscope while the patient was asleep, a strain could readily be observed.

Sometimes, as in the case of many children, other parts of the body may be under a strain during sleep. By an unconscious effort, the muscles of the face, arms and limbs may be distorted as may be muscles of different parts of the eyeball. In some cases, the strain produces accommodation or myopia, while in other cases, hypermetropia or astigmatism are produced by this unconscious effort. These eyes frequently were found to be normal during the day.

The treatment to prevent eyestrain during sleep is not always successful. Some patients obtain most relief by practicing the long swing one hundred times or more just before retiring and the same number of times in the morning immediately after awakening. Other patients find that palming for twenty minutes before retiring is a help, and frequently the palms are left in place with benefit after the patients have lost consciousness.

## **Glaucoma.**

**By W. H. Bates, M.D..**

Glaucoma is a serious disease of the eyes which some years ago was considered incurable when chronic. In most cases, the eyeball was usually too hard and this is the symptom which more than any other was the strongest evidence we had that the eye was suffering from glaucoma. The field of vision was contracted on the nasal side and the pupil was usually more or less dilated; the cornea was not as sensitive as the normal eye. Sometimes the anesthesia, or that condition in which the cornea is not sensitive to the touch of a blunt pointed instrument, was quite marked. One characteristic symptom was the apparent appearance of colors around the flame of a candle or some other similar light.

Glaucoma is a disease of adult life and seldom occurs in children. Its uncertainty is unusual. For example, a person with normal eyes and normal sight may retire feeling perfectly comfortable. Sometime in the middle of the night, he may be awakened by a very intense pain, with total permanent blindness in both eyes from glaucoma. In a limited number of cases, pain may be absent, although the vision may be partially lowered. The sudden onset may not occur, but one or both eyes may slowly, without pain, after a long time, a year or longer, become totally blind.

In the American Encyclopedia of Ophthalmology, the article on glaucoma consists of 170 pages of solid type, describing facts connected with the symptoms, cause and treatment of glaucoma. These facts are so numerous that the writer did not have to repeat himself. He emphasized how little ophthalmologists actually knew about glaucoma. It is evident that many theories cannot all be true.

One authority claimed that the cause of glaucoma was connected with a loss of the iris angle (that part of the eye which is located at the outer part of the iris), when a formation of new tissue, resembling scar tissue, formed in the iris angle and acted as a sort of plug preventing the proper circulation of fluids of the eyeball, when there was less fluid in the front part of the eyeball than is found in the front part of the normal eye. Many cases were benefited by an ireductome, an operation in which a portion of the iris is removed. This theory went the way of some of the others when numerous exceptions were observed.

Another authority claimed that dilation of the pupil was an important factor in the cause of glaucoma.

However, many cases were found in which the pupil was contracted as much, and in many cases more, than in the normal eye.

The results of the various methods of treatment which were suggested and practiced have been so disappointing, that we hesitate to foretell what may happen after any of them have been practiced. It was a very welcome discovery made by my assistant, Ms. Lierman, that the relief of eyestrain always lessens tension, relieves pain and improves the vision. The discovery that relaxation methods cured glaucoma suggested that the cause was due to eyestrain. Experimental work proved this to be true. All methods of treatment which promote relaxation always benefit glaucoma. When the vision is good, a stare or strain or an effort made to see, brings on an attack of glaucoma. It is a difficult thing consciously to produce glaucoma by an effort to see. It is much easier to relax and benefit glaucoma. The writer has always felt great satisfaction in convincing patients that in order to have glaucoma and blindness, they had to go to a lot of trouble, work hard, and strain in order to produce it, but to benefit glaucoma was easy and required no effort whatever.

### **Treatment.**

By seeing one part of a letter best and all the rest of the letter not so well (central fixation), the letters of the Snellen test card appear improved to the maximum. Sometimes one has trouble in imagining central fixation of all the letters. On a card at fifteen feet, a patient with glaucoma could not imagine the letter "F" by central fixation, but the figure "6" of the same size and at the same distance was imagined by central fixation quite readily. The patient became able to imagine a period on the top of the figure "6" and the rest of the letter appeared worse. Usually, however, when looking at the letter "F," a period could not be imagined on any part of it. Sometimes, however, after the figure "6" was seen by central fixation, the patient could, by alternately shifting from the "6" to the "F," imagine the letter also, by central fixation. I might say that there were times when the figure "6" was an optimum and the letter "F" a pessimum. Then, there were other occasions when the figure "6" was not an optimum and the symptoms of glaucoma were variable, changing, increasing, and diminishing. It is well to remember this truth, because when the patient found which letter was an optimum, or could be seen by central fixation, he was enabled to improve his vision for other letters, together with simultaneous improvement in the glaucoma.

Some of the best methods of producing relaxation are the practice of the long swing, the variable swing, the sway, palming and sun treatment. There are some people who cannot practice a certain swing correctly until after weeks of instruction. They are full of excuses and are quite ready to find fault with the method rather than with their own lack of practicing properly.

(The above mentioned methods have been described from time to time in previous issues of the magazine.)

Glaucoma may be produced solely by the memory of imperfect sight. If a person with normal eyes and normal vision presses lightly on the eyeballs through the closed eyelids and remembers or imagines a letter "O" with a gray, blurred outline very imperfect, the eyeball can be felt to increase in hardness. When the patient remembers a letter "O" perfectly, the hardness of the eyeball disappears and the eyes become normal as they were before. These experiments are offered as proof that the memory of imperfect sight is a strain which may produce glaucoma, and the memory of perfect sight a relaxation, which will relieve glaucoma. When the eye shifts, moves and uses central fixation the eye has normal softness and pressure.

One patient with acute glaucoma together with cataract could not distinguish 10/200, or the large "C" at the top of the Snellen test card. By looking at a light off to one side and flashing 10/200 alternately, the vision improved almost immediately to 10/30. She was able to remember the light when regarding the Snellen test card for a few seconds only. By alternately looking at the light and regarding the Snellen test card, her memory for the light improved, while her memory for the letters of the Snellen test card also improved.

She seemed to need supervision, because when practicing by herself, she did not flash the letters or look at them for a moment only. She stared at the light and the Snellen test card and instead of her vision improving, it became worse and it required encouragement to induce the patient to flash letters or other objects.

The memory was also improved by the practice of central fixation. When she looked at the first letter of a line of letters (placed in the center of the visual field) on the Snellen test card, she saw the other letters on the same line (in the peripheral field) not so well; the memory of letters and other objects seen by central fixation became very much better in a short time. The patient's memory was also improved by the imagination of the halos, that is, when she regarded a white center of a letter "O" and imagined that she saw it whiter than the rest of the card, her memory and the halos also improved.

### **Case Reports. CASE ONE.**

A woman, fifty years of age, was suffering from retinitis pigmentosa, incipient cataract and chronic glaucoma. After daily treatment for six months, the vision was improved from 10/200 to normal. Palming, shifting and swinging gave the best results. She acquired the habit of imagining stationary objects to be constantly moving. The objects in her rooms, the furniture, window shades, the rugs, the ceiling, in fact all stationary objects seen could be imagined to be moving whenever she moved her head and eyes. Alternately looking at the sun and stationary objects in the house improved her sight. When she was out of doors, she imagined the sidewalk to be coming towards her, or if she looked to one side, that the buildings or other objects were moving in the opposite direction. (Oppositional Movement)

Another method which helped her was to stand before a window and imagine the curtain cord to be moving in the opposite direction as she swayed her body from side to side, while a building in the distance appeared to be moving in the same direction as the movement of her body. Oppositional Movement = When moving the eyes, head, body left, right, up, down, any direction: close objects appear to move in the opposite direction, distant objects appear to move in the same direction the eyes, head, body move to and close and distant objects appear to move against each other in opposite directions.

Distant objects actually appear to move opposite but move so slow in the opposite direction that they appear to move in the same direction the eyes, head, body are moving to. The function of oppositional movement helps the brain determine depth, distance, placement, space of objects at different distances, dimension, 3-D vision, binocular vision, fusion, ability to calculate the time it takes to travel to, from a object... and other functions of the brain, body, visual system.

It was very interesting to observe that the pigment spots of the retinitis pigmentosa were disappearing from view; the symptoms of glaucoma also disappeared gradually. When she remembered perfect sight, one could, with the ophthalmoscope, see the cataract immediately becoming less. When she remembered imperfect sight, the cataract became very opaque. Besides obtaining normal sight for the distance, she became able to read diamond type at six inches without glasses.

In the beginning of the treatment, the left eye was the better eye. However, the left eye was treated for more than six months before normal vision was obtained, while the vision of the right eye improved from 10/200 to 20/20 after only one week of treatment.

This patient was very grateful for the benefit she received and could not understand why many of the ophthalmologists whom she had consulted previously did not refer her to me. Her constant question was: "If these other doctors could not cure me, why did they not send me to the doctor who could?"

## **CASE TWO.**

A physician had been in the habit of attending a gymnasium and after he had finished with his exercises he usually bathed in the pool. The exercise and the bathing seemed to agree with him perfectly and although he had been taking these baths almost daily, no injury to his eyes could be detected. One night he was awakened by a severe pain in both eyes, which stopped only after the use of morphine. In the morning he was practically blind.

The doctor whom he consulted said that he was suffering from glaucoma and iritis. The iris was inflamed and the pupil opaque from the presence of inflammatory exudation. The eyeballs were very hard. This severe inflammation continued for more than six months. Accidentally, he heard of my method and came to see me, very hopeful. He told me, after relating the above, that he had had my book read to him and that he had felt decidedly encouraged.

Upon examining him, I found the eyeballs very hard, his field of vision contracted more on the nasal side than elsewhere; the pupils of both eyes contracted and his sight reduced to 1/200. He asked me if I thought that his eyes had been infected or if he had injured his eyes by striking the water when he dove into it. I told him that I did not believe that had anything to do with it, and that his trouble was brought on by mental strain.

The patient was advised to practice at home those measures which had already improved his sight while he was at my office, palming, swinging and sun treatment. At his second visit, a few days later, he was further encouraged. The redness of the white part of the eyes had entirely disappeared. The pupil was no longer contracted, but was dilated to the same extent as is found in most normal eyes.

He was much pleased that the sun treatment had been of marked benefit. He said that he had read in many eye books that persons suffering from iritis should protect their eyes from the injurious effects of the light by wearing dark glasses. He also said that he was convinced that the sunlight and other forms of light were a benefit to his iritis and not an injury.

His condition continued to improve, and in a few days he was able to read the large type of a newspaper without

discomfort. I said to him: "why don't you read the small type?" He answered that he was afraid he would strain his eyes. My answer to this was to hand him a card on which was printed some sentences of diamond type. He was able, much to his surprise, to read the diamond type at about six inches. This amused him so much that one could hear him laughing almost a block away. He compared his ability to read fine type with his ability to read the large type of a newspaper and found that the diamond type was easier. He said: "Why is it that I see the diamond type easier than I do the large print?" I replied that it was because in order to read the diamond type, his mind had to be relaxed. If he strained, he could not read it. If he could not read it, he strained. He was advised to read as much diamond type as he had time for.

The patient was encouraged to keep up the treatment until a complete cure was obtained.

### **A Case Of Absolute Glaucoma. By Emily C. Lierman.**

#### **This article contains descriptions, directions for a variety of Bates Treatments.**

A man, aged 68, with absolute glaucoma was brought to me by his physician, who was quite sure that the Bates Method could do nothing to restore his sight. This man had had three operations on both eyes; the first operation was performed in the year 1924. He had no perception of light in the right eye and could see but very little with his left eye, not more than 1/200. The doctor who brought him was the most skeptical person I have ever come in contact with. His manner in regard to the method was almost insulting, and I resented his attitude very much. I had a conversation with him over the telephone previous to the appointment which was made with his patient. He was to give me an hour with this man, and if at the end of that time I could improve the patient's sight, even a particle, he would believe that Dr. Bates was right when he claimed that glaucoma was curable by his method.

I never felt more determined in my life to do the best that was in me for this patient. Before the hour of his appointment, I sent him my book, "Stories from the Clinic" by special messenger to him and asked him to read what I had written about the relief of strain in glaucoma.

When the doctor entered my office with his patient, one could see by his face that he was ready to prove that his patient would receive no benefit in his sight. I was in a fighting mood myself and my eyes, I feel sure, told him of my determination to prove that he was wrong and I was right. I informed the doctor immediately that even though his patient was a wealthy man, I would not accept a fee at this time, but if the patient received further treatment from me or from Dr. Bates, he would have to pay a bonus in advance besides the regular fee, for the hard work which would be before us. As I look back upon that day and hour which I spent with his patient, I realize how hard I worked.

The right eye, as I have said, had no sight at all because the retina was almost destroyed and there were other complications caused by the operations. Because of this, it was not necessary for my patient to cover his right eye while the left eye was being tested.

I produced the white test card with black letters, as the patient sat by a window with the sunlight shining on the whole card. I watched to see what effect the strong light reflected on the card would produce. Immediately the patient drew back, as if the strong light hurt his sight. I was pleased to note this, as I knew then that the patient was sensitive to the strong light which, of course, was in my favor, because sun treatment would overcome this sensitiveness and probably improve the vision. The doctor made no comment. At one foot from his eyes, the patient could flash the 2 (200 line) letter "C" as he moved the card slowly from left to right before his eyes. More than that, he could not see without causing a great deal of effort. Then I changed the card and replaced it with the black test card with white letters, placing the card in his hand as I had the white card. I directed the patient to keep the card moving slowly from side to side and to blink as he moved the card. By doing this, he flashed the 100 line letters, one at a time. Occasionally, I glanced at the doctor's face to see whether he was pleased or not. He might have been a sphinx for the lack of interest which he showed.

My next plan was to have the patient palm, which I told him how to do, and while he was palming, I asked him to tell me what interests he had in life. He said he was a banker, so I advised him to remember figures on bank notes as well as he could; also to remember other things in regard to the work which he is most interested in. I avoided any unpleasant conversation regarding his eye trouble, which he unconsciously referred to from time to time.

I explained to him that his poor sight worried him more than he realized, but if he believed in what I was trying to do for him, he would not feel so hopeless in time to come. Jokingly, and half in earnest, I remarked, "You must have a better attitude of mind than your doctor has at the present time," which brought for the first time a smile to the face of the doctor. The patient said he was willing to believe that I could help him and I know that

he meant it.

While the patient was palming, I placed the large black test card with white letters upon a test-card stand, which I arranged five feet from where the patient was sitting, and in an ordinary light. Again I looked at the doctor, but he made no sign of being in doubt or otherwise. This would have been discouraging, I know, to most of our students, but I have had so much experience with people like him, that I paid no more attention to him than if he were not in the room. It was the only way for me to keep from either weeping or gnashing my teeth. After the patient had palmed for more than ten minutes and had removed his hands from his eyes, I asked him to stand. As I held both his arms at the elbow, I asked him to sway from side to side with me. Of his own accord the patient remarked, with a smile, how relaxing it was to sway his body, and that he enjoyed doing it. At first he did not recognize the card where I had placed it, and I myself did not mention to him what I had done while he was palming. I told him that he was to keep up the swing of his body until he discovered the test card and was able to read some of the letters. I also informed him that he was not to try hard to see any letter, but to keep up the sway.

Anyone interested in our work can imagine how happy I was to hear him say, "I think the middle letter of the third line is an 'O'." Before I allowed him to go any further, I told him to sit down again and palm. I felt that the palming had had as much to do with the improvement in his sight as did the swinging of his body. While the patient was palming, I told him to remember anything which was pleasant, that it did not matter much what it was. Some patients enjoy remembering a sunset, or a white cloud in a blue sky. I reminded him of these things and also told him it was necessary for him to shift from one thing to another and not to concentrate on any one thing.

While he palmed, he said that he had had a bad habit for years of concentrating or trying to concentrate, which he thought was beneficial, but now realized that this produced more strain and discomfort. It was nice to hear the patient explain these little things to me, because it proved to the doctor who brought him that he was anxious to help me in what I was trying to do for him. This time the patient palmed for about fifteen minutes and then we started the standing sway of the body, having him blink regularly as he did before. This time, he read every letter of the 5 line (also called 50 line on other eyecharts), seeing one letter at a time and looking away quickly to avoid staring. A great feeling of satisfaction came over me as I saw that the doctor was watching the patient closely. Nothing was said, however, because we both felt the need of silence at this time.

The patient began to strain unconsciously to read the next line of letters, but I avoided having him read any further until he had again rested his eyes by palming. This time it was not necessary for me to again remind him to use his memory, for he immediately mentioned how white the letters looked on the black background when he did not look at the card longer than a fraction of a second: I said that it was a good thing for him to alternately remember the black margin of the card and then remember the white letters as he saw them, or if he possibly could, without an effort, to imagine the letters whiter than he really saw them. After he had rested his eyes in this way for ten minutes or longer, I placed him in the sun, and with my sun-glass I focused the strong rays on his closed eyelids. Some patients draw away when they first receive the sun treatment, but this patient enjoyed the strong light of the sun from the start, which made it easier for me to treat him.

After the sun treatment, he again read the test card at the same distance, and this time, he read all of the 3 line. (30 line) The patient turned to me and thanked me for my efforts and for what I had done for him. He also told me that he would try to do without the strong magnifying glass which he had been using for a few years to help him in his work. I explained how dangerous it was for him to continue the use of the magnifying glass even though it helped him to see things better at the time. As this patient had never heard of the Bates Method before, I am not sure that he realized the importance of what I explained to him. I really helped him and improved his vision from 1/200 to 1/6 of normal in one hour's time under unfavorable conditions, for which he was grateful.

As the time for the treatment was over, I had to let the patient go, but I had satisfied the skeptical doctor who not only fought me with his mind, but also tried to prove to me that Dr. Bates' statements were false when he claimed to relieve tension in glaucoma and also improve the sight when other methods had failed. I never saw this patient again, because he lived a great distance from my office, but I feel sure that the doctor is no longer skeptical, but is at this time helping others in the cure of imperfect sight without glasses.

### **Questions And Answers.**

Q - I have a high degree of myopia. Approximately how long will it take to obtain a cure by your method?

A. - It is impossible to say, as people vary so in their response to the treatment.

Few minutes, hour, day, week, month, year - depending on the individuals type/amount of strain, understanding and correct use of the Bates Method.

Q - How often should one with imperfect sight palm during the day and for how long?

A - Palming should be done as often as possible during the day, ten times at least, for five, ten, fifteen, minutes or longer at a time. Some people obtain more benefit from short periods than from longer periods.

Q - Am forty-nine years of age and have had to wear glasses for five years, due to gradual weakening of the eyes. Is this curable?

A - Old-age sight is curable, and you can discard your glasses by following the methods as outlined in the book, "Perfect Sight Without Glasses."

Q - If one's arms become tired while palming, will a black silk handkerchief covering the eyes produce the same amount of relaxation one gets from palming?

A - No. Palming is the best method for relaxation and improvement in vision. When tired of palming, the hands can be removed and the eyes kept closed until one feels relaxed.

Q - Can the vision be improved without glasses after the lens has been removed for cataract?

A - Yes.

Q - Can squint (crossed, wandering eyes) be cured by treatment without glasses after an eye muscle operation proved unsuccessful? Does age make any difference?

A - Yes. Age does not make a difference.

Q - Will it still be necessary to continue practicing the method of swinging and shifting after my eyes are cured?

A - No. When you are cured of eyestrain you will not be conscious of your eyes. However, if you strain them, you will know what to do to relieve the strain.

Q - Is it a strain to the eyes to read while riding on a train?

A - No, if there is no discomfort. It is a good thing to look out of the window and see the scenery moving in the opposite direction to that in which you are going, and then continue to read. (Oppositional movement)

Q - What causes and cures abnormal watering of the eyes?

A - Strain produces watering of the eye. Relaxation obtained by palming and swinging will cure this trouble. Avoid sunglasses, tinted, colored, UV blocking lenses, eyeglasses, contact lenses.

## **Demonstrate.**

### **(Sunning and use of the Sunglass).**

1 - That sun treatment is an immediate benefit to many diseases of the eye.

Before the treatment, take a record of your best vision of the Snellen test card with both eyes together and each eye separately without glasses. Then sit in the sun with your eyes closed, slowly moving your head a short distance from side to side, and allowing the sun to shine directly on your closed eyelids. Forget about your eyes; just think of something pleasant and let your mind drift from one pleasant thought to another. Before opening your eyes, palm for a few minutes. Then test your vision of the test card and note the improvement. Get as much sun treatment as you possibly can, one, two, three or more hours daily.

When the sun is not shining, substitute a strong electric light. A 1,000 watt electric light is preferable, but requires special wiring. However, a 250 watt or 300 watt light can be used with benefit, and does not require special wiring. Sit about six inches from the light, or as near as you can without discomfort from the heat, allowing it to shine on your closed eyelids as in the sun treatment.<sup>2</sup> - That the strong light of the sun focused on the sclera, or white part of the eyeball, with the sun glass, also improves the vision.

After the eyes have become accustomed to the sunlight with the eyes closed, focus the light of the sun on the closed eyelids with the sun glass. Move the glass rapidly from side to side while doing this for a few minutes. Then have the patient open his eyes and look as far down as possible, and in this way, the pupil is protected by the lower lid. Gently lift the upper lid so that only the white part of the eye is exposed, as the sun's rays fall directly upon this part of the eyeball. The sun glass may now be used on the white part of the eye for a few seconds, moving it quickly from side to side and in various directions. Notice that after the use of the sun glass, the vision is improved.

## **Blindness.**

**By W. H. Bates, M.D..**

When the normal eye has normal sight, it is constantly moving. When it has imperfect sight or is partially or completely blind, it is always seeing stationary objects or letters stationary, or is making an effort to do so. These two truths suggest the prevention or cure of blindness.

When adults, school children and others are taught to imagine stationary objects to be always moving, the vision always improves.\*

To do the wrong thing, namely, to imagine or try to imagine all objects stationary, very soon becomes associated with an effort or strain. Why is it a strain to have imperfect sight? Because it is impossible for the eyes or mind to concentrate. To regard a point continuously is difficult or impossible. Trying to do it, is trying to do the impossible; and trying to do the impossible is a strain.

All cases of imperfect sight or blindness are caused by a strain. When the strain is relieved or corrected by closing the eyes and resting them, the vision always improves.

It can be demonstrated that blindness from conical cornea, ulceration and inflammation of the cornea can, in all cases, be made worse by straining or making an effort to see. This is a truth, and, therefore, has no exceptions.

(Stationary objects appear to move when the eyes move, shift. - Oppositional movement.)

Stare at a object – Do not shift on it – The object does not move, no oppositional movement is seen – Strain and blur results.

Look at the object – Shift on the object part to part – The object appears to move in the opposite direction the eyes shift to: Oppositional Movement– Relaxation and clear vision.

### **Glaucoma.**

GLAUCOMA is a serious disease of the eyes. In most cases, the eyeball becomes hard and this hardness can be felt by pressing lightly on the closed eyelid with the fingers. For the relief of this hardness, various operations have been performed to promote the escape of the fluids of the eyes. These operations have not always been satisfactory. Many cases of glaucoma have been relieved for a limited period of time, but sooner or later, become totally blind. When blindness occurs, operations have usually failed to restore the sight.

CAUSE. (and symptoms) The theory that the disease is caused by a hardening of the eyeball is incorrect, because we find cases of glaucoma in which the eyeball is not increased in hardness, and there are cases of hardening of the eyeball in which there is no glaucoma. The normal eye may be hardened temporarily by conscious eyestrain. The cause of glaucoma, in all cases, is eyestrain, and may be demonstrated as follows: When the normal eye has normal sight, it is not under a strain. When a letter or an object is remembered or imagined imperfectly, the eyeball at once becomes hard. Other symptoms of glaucoma may also be observed, namely, one may see rainbow colors around the flame of a lighted candle. Another symptom is the pulsation of one or more of the retinal arteries. In most cases, severe pain has been observed.

Patients with glaucoma usually suffer not only in ways already mentioned, but also from other symptoms just as severe and more difficult to describe. Glaucoma affects the nervous system and produces not only extreme depression but disturbances in all the nerves and organs of the body.

TREATMENT. When a person is suffering from glaucoma, the memory of perfect sight produces complete relaxation with a temporary cure of the glaucoma.

Too many cases of absolute glaucoma, totally blind with no perception of light, suffering an agony of pain with great tension or hardness of the eyeball, have been enucleated. Acute, absolute glaucoma may have no manifest organic changes in the eyes.

When the eyestrain is relieved by palming, swinging and the use of a perfect memory or imagination, these cases have always obtained temporary relief at once and a permanent relief by the continuation of the relaxation treatment.

### **Cataract .**

In CATARACT, the pupil instead of being black becomes a light gray or some other color, due to the opacity of the focusing lens of the eye, which is just behind the colored part of the eye, the iris. Rays of light which enter the eye pass through this lens and are focused on the back part of the eye, the retina. When the lens becomes

opaque, the rays of light from different objects do not pass through the lens and the vision is consequently lowered and the patient becomes more or less blind. If one places six sheets of glass, one on top of the other, so that all are parallel, it is possible to see through them. If, however, one or more of the glasses form an angle or is not parallel with the rest, the layers of glass become cloudy, just like the layers which form the crystalline lens in cataract.

**CAUSE.** Cataract has been observed for many thousands of years by the people of India, Egypt, and in various countries of Europe. The theories of the cause of cataract are very numerous. The lens is composed of transparent layers. When these layers are squeezed or when the eyeball is squeezed, the layers which form the lens become cloudy or opaque. It is a very simple experiment to take the eye of some animal which has just been slaughtered and to hold it with the tips of the fingers of one hand. By pressing the eyeball, the lens at once becomes cloudy and a white mass, which can be seen twenty feet or further, usually appears in the pupil. With the cloudiness of the lens, there may occur at the same time, a cloudiness in the front part of the eye, the cornea. Just as soon as the pressure is removed from the eyeball, the area of the pupil becomes perfectly clear and the lens becomes perfectly transparent. It is such an easy thing to try and is so convincing that I wish that more ophthalmologists would study it.

Pressure of the eyeball may come from the contraction of the muscles on the outside of the eye, which are quite capable of keeping up a continuous pressure for many years, without the patient being conscious of it.

Cataract has been produced in normal eyes by the memory or the imagination of imperfect sight. The memory of imperfect sight produces a strain of the outside muscles of the eyeball, which is accompanied by a contraction of these muscles, and cataract is produced.

Almost any kind of opacity of the lens has been produced by pressure. The area of the pupil may become varicolored, due to the difference in pressure. The strain of the eye or mind which produces cataract is a different kind of strain than that which produces glaucoma. Every symptom of eye trouble is caused by a separate strain. The strain which produces near-sightedness is a different kind of strain than that which produces astigmatism or inflammation of the cornea or inflammation of the colored part of the eye, the iris. The strain which produces pain is not the same strain which produces squint. One may practice the strain which produces squint continuously without necessarily producing pain. The strain which produces cataract does not produce pain. Cataract is a disease of the eye which is never accompanied by pain unless the patient with cataract also strains in a way which produces pain. The strain which produces cataract never produces pain.

**TREATMENT.** Palming, swinging, sun treatment, and other methods of relaxation treatment\*1 cures cataract because it relieves eyestrain which is the cause of cataract.

September 1927

Described in the book "Perfect Sight Without Glasses," by W.H. Bates, M. D., and previous issues of "Better Eyesight" Magazine.

### **Conical Cornea.**

In CONICAL CORNEA, the front part of the eye bulges forward and forms a cone-shaped body. The apex of the cone usually becomes the seat of an ulcer and sooner or later, the vision becomes very much impaired. In advanced cases, the patient suffers very much from pain. Various operations have been performed, but the results have always been unsatisfactory.

**CAUSE.** The cause of conical cornea is eyestrain. The fact has been demonstrated that those measures which cure eyestrain; palming, swinging, the variable swing, as described in paragraph 7 of the Fundamental card, and the use of the memory and imagination,—are a benefit or a cure of conical cornea.

### **Opacity Of The Cornea**

The cornea, when healthy, is perfectly transparent and does not interfere with the vision of the colored part of the eye, or pupil, but when the cornea becomes opaque, the opacity may be so dense that the color of the iris cannot be distinguished, and there is no perception of light.

Cause. Opacities of the cornea are said to be caused by infections, ulcers or some general disease, but there are many cases which are caused by eyestrain, because when the eyestrain is relieved by relaxation treatment the opacity of the cornea always improves and the vision becomes normal.

#### Blindness Cured

Treatment. One patient, forty years of age, had been blind from birth. The corneas of both eyes were totally opaque, so that it was impossible to see the color of the iris. The patient was helpless on the street and required someone to lead him. Central fixation, the use of his memory and imagination, and other methods for the relief of eyestrain were practiced. The Sun treatment was especially beneficial. The patient was taught to expose his closed eyelids to the sun for many hours daily.

At the end of a few months' treatment, he became able to recognize people on the street. He was taught the alphabet and the names of the figures. When his knowledge of the letters became perfect, he was able to read the Snellen test card, 20/20. He was also able to read fine print without glasses. After thirty-five years, his friends reported that his eyes were still normal.

Another case was that of a woman, aged seventy-five, who had to be led into the office. She had suffered from inflammation of the cornea of both eyes for many years, and had frequent attacks of ulcers. From time to time, these ulcers would heal, but they always left a scar.

When the patient was first seen, a scar tissue involved the whole cornea, so that one could not distinguish the colored part of the eye. I believe that eyestrain was the only cause of the trouble, because the sun treatment, palming and swinging, brought about an improvement so that the cornea became perfectly clear, and the vision of the patient for distant and near objects was normal.

#### The Blindness Of Squint Or Amblyopia Ex Anopsia.

In cases of SQUINT, the vision of the eye which turns either in or out is variable. In many cases, the squinting eye may have normal vision, but in the majority of cases, the vision may be very much lowered, and in rare cases, the squinting eye may be totally blind with no perception of light.

**CAUSE.** There have been many theories proposed to account for the blindness of squint. I have found, however, that the cause of the blindness is due to eyestrain.

**TREATMENT.** The vision of these cases is benefited by relaxation methods - palming, swinging and the use of the memory or the imagination. A letter may be imagined perfectly or imperfectly. When imagined imperfectly, the vision is always lowered. When imagined perfectly, with the eyes open as well as with the eyes closed, the vision is always improved. By remembering or imagining a letter, with the eyes closed for half a minute or longer, one becomes able to imagine a letter quite perfectly with the eyes open for a few seconds. Repeat.

**CASE HISTORY.** In one case, a woman, about thirty years of age, was totally blind in the right eye which turned in, although the eye itself was apparently normal. That is to say, there were no opacities in any part of the eye, and the retina and optic nerve were normal.

With both eyes open, the vision was 15/20. By practice, with the aid of her memory and imagination, the vision, with both eyes, soon became normal without glasses, 15/10. Coincident with the improvement of the vision of both eyes together, which meant an improvement in the vision of the left eye, the patient gradually became able to distinguish light in the right or blind eye. In less than two weeks, after daily treatment, the vision of the right eye became normal and the eyes straight.

It seems curious that so many articles have been published on amblyopia (dim-sightedness) ex-anopsia (from lack of education or use of eye) without going further and studying the results of the opposite of ex-anopsia, - relaxation methods of treatment.

## **Blindness. By Emily C. Lierman.**

On March 19, 1927, a woman came to me who was affected with temporary blindness. She was not with me longer than five minutes when I noticed that she was under an intense mental and nervous strain. When I spoke to her, tears welled up in her eyes. Every part of her body was tense and the white parts of her eyes, i.e., the sclera, were blood-shot and she had no desire to keep them open in a natural way. She told me that she had had trouble with her eyes as long as she could remember. Blocks of blind spots were visible before her eyes at all times; blindness caused by strain. She said she always kept her glasses near her bed so that she could put them on first thing in the morning.

Her sight was better at night than in the daytime. The daylight caused her a great deal of discomfort and pain and most of the time she had a desire to keep her eyelids lowered. When she was wearing her glasses, she felt more depressed than when not wearing them. Her eyes itched and she had rubbed her eyelids until they had become soar. This caused her to be more nervous than ever. Long periods of daily sun treatment finally cured the itching of her eyelids.

When I tested her sight with the test card, her right vision was 15/20 but she strained very hard to see the letters, which gave her eyes the appearance of being closed. The vision of the left eye was 15/50 and it caused her pain when she read with it. I encouraged her to palm and while her eyes were closed, I asked her to talk about her loved ones at home. As she told me of some of their habits and how she loved them I noticed her smile for the first time.

She was taught to stand with her feet one foot apart and sway her body from left to right; flashing the test card letters one at a time. I reminded her many times to blink her eyes in order to stop the stare, for she stared a great deal. When she finally learned how to blink while swaying, her vision improved to 15/15 with each eye separately.

I then had her sit in a chair with her back to the sunlight and gave her the Fundamental card to hold. I asked her what she could read on it. She said she could not read any of the print at all on the card. I told her to shift from the white spaces of the microscopic type, to the white spaces between the lines of the "Seven Truths of Normal Sight," which she held with the Fundamental card; flashing only the white spaces and avoiding the reading of print. This practice was kept up for almost a half-hour and I then suggested that she notice the numbers at the beginning of each sentence of the Fundamental card. Her attention was drawn to the period next to each number. She was told to notice the white spaces of the different sized type as she held it in her hand. (Then look at the period, then the letters). Before her first treatment was over, she read the sentences from number one to number five.

At the beginning of her second treatment she said that the food placed before her at the table was beginning to look like food to her before she ate it. Before, she never knew what she was eating until she tasted it.

Sun treatment was kept up regularly every day. This improved her vision for the test card and fine print to normal. I handed her a newspaper and pointed to the smallest type that I could find on the front page. The smallest print was about the size of diamond type. She read this clearly for the first time in her life. During her second treatment, when she held the card in the sunlight, her vision improved for the Fundamentals card to number eight.

After several treatments she told me that her friends were noticing how much younger she looked. The sclera of both eyes was clearing up and she was smiling most of the time. She became able to read all of the Fundamental card at reading distance, ten or twelve inches from her eyes and sometimes closer. The blind spots and black spots that had appeared before her eyes for many years, also disappeared. She was told to remain in the sun for hours at a time, keeping her eyes closed while her head moved slowly from side to side. The sway of the body was advised and she did this a hundred times in the morning and a hundred times at night before retiring.

She told me how much better she slept at night since having had her first treatment. She said it had been many years since she had had a restful night's sleep. She enjoys walking fast on the street now, noticing stationary objects moving in the opposite direction as she walks. She reads numbers in the telephone book and other print that was not clear before. Since she has been cured, she is helping others and writes about her eyes continuing to be a blessing to her. This patient has proved again that faithful practice and patience brings about the much desired result,—normal vision.

She describes her own case in the following way: "Before I was treated by Ms. Lierman for the improvement of my sight, an American flag a short distance away looked to me like a dark piece of cloth hanging from a pole. Now I can clearly distinguish the colors; the red, the white, the blue, and I believe I could count each star if the flag would stay still long enough."

“For many years the first thing I would do on awakening in the morning would be to look for my eyeglasses. I could not see or find anything without them. At the dinner table, I could not see a small fishbone on my plate, in a poorly lighted room, much less other things that the normal eye sees without any effort. Now I can see the tiny crumbs, even though they may be as white as the color of my table cloth.

Along the street, whether I was walking or riding, I could not read signs as the normal eye does. After my second treatment all signs along the street and shop windows were easily seen by me. Before I started treatment, I could not see any objects moving at all. They all seemed to stand still. Now I can see all objects moving, that are moving, and since I have learned how relaxing the sway of the body is, I can imagine stationary objects are moving as I sway. If I carried an umbrella or a purse on my arm, I would hold so tightly to these things that the effort caused pain in my hands and arms before I realized it. Now my arms and hands feel relaxed and I carry packages, an umbrella and other things without causing strain or effort. Things now come easily to me. Perhaps others who are troubled in this way would be glad to know how I was cured of this particular strain and tension caused by holding on tightly to things unnecessarily.

“Mrs. Lierman taught me how to place the palm of one hand gently, easily on the palm of the other hand. At first I did not do it gently enough for her and we practiced it together. My strain was so great, which she realized too, that I was willing to follow her in any suggestion that she made for my comfort and relief from strain. This helped me so much that I began to uncross my knees for more relaxation and rest. This helps more than one realizes and now since I know it does, I notice that nine out of ten people are under a tension most of the time because their knees are crossed. For years I have been under constant strain and tension, which caused greater depression than anything else. Since I have taken the treatment and followed Ms. Leirman’s suggestions for home treatment, I no longer feel depressed.

“After my second treatment, I could thread a needle and I was not particular either as to the size of the eye of the needle. I believe this is worth reporting because for many years I had to have my glasses handy to thread a needle whether the eye was large or small; it made no difference.

“Since I was treated, a friend of mine drew my attention to something away off in the sky. She pointed to this object and said, “look at that balloon in the distance!” I looked and said, “No, it is a kite, I can see the tail clearly.” The kite became visible to my friend and she remarked how much better my eyes were since I had discarded glasses. I have much cause to be grateful for my renewed vision!”

### **Questions And Answers.**

Q - Is memory and imagination the same? When we remember an object, do we have to visualize it?

A - The memory and imagination are not the same. It is best when you remember an object to visualize it with the help of the imagination, but it is not always necessary to visualize it. (The brain will automatically produce a mental picture of the object.)

Q - When I try to imagine a black period, it blurs and I get all colors but black.

A - When you fail to imagine a black period, it means that you are making an effort to see black. It may help you to think of a black football that has been thrown into the ocean and is being carried further and further from shore. As it recedes in the distance, it becomes smaller and smaller until it seems only a small black speck or period.

Q - Why is it a rest to read fine print? I should think it would be a strain.

A - Fine print can be read perfectly only when the eyes are relaxed. If any effort is made, the print immediately blurs. It is, therefore, evident that the more fine print you are able to read, the more continuously relaxed your eyes and mind are.

(Fine print activates perfect central fixation, and improves close and distant vision.)

See oppositional movement chapter 17 in the book: Do It Yourself – Natural Eyesight Improvement – Original and Modern Bates Method.

Q - I am following your method for squint. While riding in an automobile or train, is it necessary for me to palm?

A - No. It is beneficial to observe the universal swing, that is, looking in the distance and noticing that everything on the horizon, the clouds, treetops, etc., seem to move in the same direction in which you are moving. Without looking directly at near objects, you are conscious of the fact that they seem to be moving past in the opposite direction. Remember to blink frequently, as the normal eye does.

### **Perfect Sight.**

If you learn the fundamental principles of perfect sight and will consciously keep them in mind your defective vision will disappear. The following discoveries were made by W. H. Bates, M. D., and his method is based on them. With it he has cured so-called incurable cases:

I. Many blind people are curable.

II. All errors of refraction are functional, therefore curable.

III. All defective vision is due to strain in some form.

You can demonstrate to your own satisfaction that strain lowers the vision. When you stare, you strain. Look fixedly at one object for five seconds or longer. What happens? The object blurs and finally disappears. Also, your eyes are made uncomfortable by this experiment. When you rest your eyes for a few moments the vision is improved and the discomfort relieved.

IV. Strain is relieved by relaxation.

To use your eyes correctly all day long, it is necessary that you:

1. Blink frequently. Staring is a strain and always lowers the vision.

2. Shift your glance constantly from one point to another, seeing the part regarded best and other parts not so clearly.

That is, when you look at a chair, do not try to see the whole object at once; look first at the back of it, seeing that part best and other parts worse. Remember to blink as you quickly shift your glance from the back to the seat and legs, seeing each part best, in turn. This is central fixation.

3. Your head and eyes are moving all day long. Imagine that stationary objects are moving in the direction opposite to the movement of your head and eyes. When you walk about the room or on the street, notice that the floor or pavement seems to come toward you, while objects on either side appear to move in the direction opposite to the movement of your body. (Oppositional Movement)

### **The Stare.**

**By W. H. Bates, M.D..**

Much can be written about the stare. In the first place, when a patient stares, an effort is always made to hold the eyes still without moving them. It is impossible to hold the eyes perfectly still. Trying to do the impossible always requires a strain. This strain can be demonstrated to be a mental strain which affects all the nerves of the body as well as the eye. With a mental strain, the memory and imagination become imperfect and imperfect sight results. Pain, fatigue or dizziness, are acquired or made worse. With relaxation of all the nerves, the sense of touch is improved, but with the stare or other efforts to see the sense of touch is lost while the sense of pain is increased. Staring=not moving/shifting the eyes. Keeping the eyes, visual attention on only one part of a object without shifting on the part, without shifting to a new part, or trying to see all parts of a object or all objects in the central and peripheral field clear at the same time without shifting part to part, object to object. This is diffusion, eccentric fixation. These two types of staring result in strain and unclear vision.

Glaucoma, acute or chronic, has been consciously produced by the stare. The fundamental symptoms of glaucoma may be present with or without increased hardness of the eyeball, contraction of the nasal field, or glaucomatus excavation of the optic nerve. In glaucoma the blood vessels of the retina appear to be arranged in the form of a right angle just as they dip down into the nerve. The whole papilla where the optic nerve enters the back part of the eye is all white instead of pink. Changes which are seen in the optic nerve are organic. The contracted field may be considered to be functional because there are many cases which recover and the field becomes clear.

This suggested that in glaucoma the patient be recommended to alternately stare and relax. When he is staring and trying to improve the vision by an effort, all the symptoms of glaucoma may be increased. If the stare is the cause of glaucoma, relaxation should always lessen the severity of the symptoms.

There are some patients who have been using the stare to improve their vision for a sufficient length of time to acquire the habit without being conscious that an effort was being made. Each individual case may require individual treatment in order that the patient may become, by practice, conscious of the stare when the vision is lowered. Of course, if the stare increases the glaucoma, by stopping the stare we would expect the eye to improve. If it does not improve, the patient is still staring, whether he knows it or not. Sometimes by increasing the distance of the test card from the eyes while the patient is staring, he often becomes able to demonstrate that the stare is present when the vision becomes worse.

Many adults past middle life unconsciously stare and produce glaucoma. By practice they become conscious of the stare. While the stare, when it is strong enough and sufficiently prolonged, usually increases the hardness of the eyeball, in the matter of treatment the great problem is to suggest measures which will enable the patient to demonstrate that the stare is the cause of increased tension of the eyeball in glaucoma.

Absolute glaucoma is a serious disease and the stare can become so great that a large amount of pain and total blindness will be produced. The pain may be so severe that many ophthalmologists feel justified in removing the eyeball to bring relief. While many cases of absolute glaucoma obtained much relief from pain after the removal of the eyeball, there were too many cases which still had severe trouble, even after such an operation. A strain which produces absolute glaucoma is really a mental strain and not a local one entirely.

Trigeminal neuralgia is also a very serious eye trouble. Many operations have been performed for its relief, most of which were failures. Some patients have had nearly all of the fifth nerve with its branches removed in order to relieve the pain. There are many patients who have not obtained permanent relief from pain after various methods of orthodox treatment were employed. In the severest cases the branches of the fifth nerve at their origin in the gasserian ganglion in the brain have been removed, as well as the ganglia, without any permanent benefit whatever. I have discovered that the stare was the cause of the brain tension and that when the stare was relieved, all the symptoms of trigeminal neuralgia were relieved or cured and the vision became normal.

Conical cornea has for many years been considered incurable. A great many operations have been performed in which a small part of the cornea was removed with the expectation that when it healed the conical shape of the cornea would be corrected and the vision would thereby be improved. These operations were usually a disappointment. Conical cornea has been treated by relaxation methods and with great success.

When the forefinger of one hand is held about six inches to one side of the face and about six inches straight ahead, the patient, by moving the head and eyes from side to side slowly or rapidly, can imagine the movement of the finger from side to side. This movement of the finger is called the variable swing and is specific for the benefit of all cases of conical cornea. It owes its value to the fact that when the finger appears to move, the injurious stare is prevented. The length of time necessary to improve the vision with the help of the variable swing usually is not very long.

Iritis occurs quite frequently. The cause has heretofore been ascribed to syphilis, rheumatism, or some other constitutional disease. Chronic cases are seldom cured until after months of persistent treatment. Pain in acute iritis may be very severe and the vision is usually lowered. While treating patients in one of the out-patient departments of a city hospital, one of them applied for treatment of iritis which had produced so much blindness that he required an attendant to help him. The eyeball was very red, the pupil contracted, and the vision very imperfect. He suffered very much from photophobia or sensitiveness to light and kept his eyes covered most of the time.

I turned him over to my assistant with directions to obtain relaxation by palming, swinging or the memory of perfect sight. One-half hour later the patient disturbed the Clinic by laughing frequently, because the symptoms of iritis had almost entirely disappeared. He walked about the place, telling anyone who would listen to him about his prompt recovery. This patient was able to increase the symptoms of iritis by the stare and lessen them by relaxation.

### **Surgeon Creates Corneal Astigmatism.**

It may not be generally known that the stare is the cause of corneal astigmatism. With the aid of the ophthalmometer, most cases of corneal astigmatism can be diagnosed and measured. The ability of some people to produce corneal astigmatism is interesting. Some years ago a house surgeon in one of our largest hospitals acquired considerable notoriety or fame by his ability to produce temporarily a considerable amount of corneal astigmatism by staring at the opening tube of the ophthalmometer. He spent many hours experimenting on his eyes and he had become able not only to produce astigmatism at an angle of 90 degrees but also at an angle of 180 degrees. It required many months of constant practice before he became able, with the aid of the stare, to produce astigmatism with an oblique axis. Although he enjoyed the experimental work,

which had for its object the cure of corneal astigmatism, so many doctors criticized him adversely that he stopped.

It was believed at one time by many physicians that myopia was caused by straining to see at the near point. Experiments to produce near-sightedness by an effort to see at the near point were failures. All the men, and there were many, who tried to produce near-sightedness or to lengthen the eyeball by efforts to see at the near point and so produce myopia, found instead the opposite condition, hypermetropia, (unclear close vision) with a shortening of the eyeball. The stare can produce a different kind of strain in each case and therefore cause a different eye defect or disease.

Some years ago a friend of mine called to see me and to learn about my experiments. I said to him: "Doctor, would you like to see a case of cataract produced and cured?" I took him into a dark room where one of my patients, a woman about seventy years of age was seated. After he had seen her he recognized her as one of his former patients. He told me in a low voice that arrangements had been made for taking her into a hospital and operating upon her eye.

I gave him an ophthalmoscope with a plus 18 convex glass which produced a very much enlarged image of the cataract. I asked the doctor if he could see the cataract, and he replied that the area of the pupil was completely filled with the cataract, and that there was no red reflex. He said that he believed that one would be justified in operating for its removal.

"Before we do that," I said, "suppose we look at the lens again." So we looked at the lens again with the ophthalmoscope and again he showed me that it was a proper case for operation.

"Well," I said, "suppose we keep looking at the cataract for a few minutes." I asked the patient if she had a good memory for flowers. She replied that she had. I asked her what flower she could remember best. She answered: "I believe I can remember a yellow chrysanthemum better than any other flower." I then said to the doctor: "how is the cataract?" "Why," he said, "it has disappeared." He was evidently very much puzzled.

I then asked the patient if she could remember my first name. She answered: "No." I said. "Suppose you try." She immediately began to stare and the upper part of the lens became opaque and all the muscles of her face were under a strain.

We investigated this case for half an hour or longer and came to the conclusion that the memory of perfect sight was a cure for cataract and the memory of imperfect sight, which is usually associated with a stare, the cause of cataract.

The relief of eyestrain or the stare has benefited so many heretofore considered incurable cases that the conclusions made should be investigated. If it is true that the stare can cause so much pain or suffering it is a breach of medical ethics for any doctor to deprive a man or women of relief by the use of such simple successful methods of treatment.

### **Staring Relieved By Treatment. By Emily C. Lierman.**

A woman who had been suffering from pain and imperfect sight was sent to me for treatment. She suffered more at business than at any other time, and glasses did not help her much. Having charge of a tea room she was continually greeting patrons and placing them at tables. At times she seemed to have no trouble at all with her eyes and was able to read any part of the menu to patrons who asked her to do so, without using her glasses, which she wore most of the time. She had worn glasses off and on for four years and disliked them exceedingly, because they did not become her. Shortly before coming to me, she was told by an eye specialist that she would have to wear bi-focals. She was ready then to try most anything rather than wear them.

Her vision for the test card was 15/20 in both eyes, but with fine print and ordinary type she did not do so well. I began treating her by having her palm and while her eyes were closed and covered, I explained that some patients were not helped by palming, but if that were so in her case, we would try something else. She had a good memory for objects and people's faces, but her memory for names was not so good.

I asked her to describe to me all the sections of the tea room that she could remember. In this way, her memory and imagination would improve for other things which were not remembered or imagined so well. She described in detail how the tables were arranged and the design of the table silver. She could not remember the pattern of the tablecloths and napkins, although when she purchased the table linens, she purposely selected a certain pattern because it appealed to her. This worried her, but I explained that after she had learned how to relax under unfavorable conditions, she would be able to remember such details. I directed her to keep her eyes closed for more than half an hour, at times keeping perfectly still without speaking to me.

(I watch patients very closely while they are palming to see whether they are in a comfortable position and if not I try to arrange it so. I find that when the knees are crossed, the position soon brings on an unconscious strain; therefore I direct the patient to keep the knees uncrossed. Then I arrange the feet so that they are

comfortably placed either on the floor or on a footstool or hassock. The patient is usually most comfortable in an armchair and if the arms of the chair are not upholstered, I place a cushion under one elbow in such a way that the patient is most comfortable. This brings the patient in a position leaning over to the right side or to the left, so I try to have the patient change the position while relaxing by reversing the cushion to the opposite arm of the chair. With children I manage a little differently, especially when not tall enough to rest their feet on a footstool.)

It is best to place the cushion on the lap or a table for both left and right elbows to rest upon. This keeps good posture, evenly aligned and relaxed body, shoulders, neck, head.

The test card which I used for this patient had an extra line of letters smaller than the 10-line letters, which are read by the normal eye at ten feet. After this woman had palmed sufficiently, I removed the foot stool and while her eyes were still closed I told her to stand up and to start swaying her body slowly with an easy sway of the body from left to right. Then I told her to open her eyes and look from one edge of the Snellen test card to the other and to tell me what the letters were as I pointed toward them. She read every letter of the test card with each eye separately without any difficulty whatever.

The patient was so excited over her sudden improvement in sight and the relaxation which she felt of her whole body, that she thought one lesson was all that would be necessary for her. I thought that the improvement during her first treatment was only temporary and told her so. However, I was willing to give the patient the benefit of the doubt and told her that if her vision remained normal and she felt no more strain or discomfort, that it surely would not be necessary for her to take another lesson.

Early the next morning my telephone rang and it was she, explaining her discomfort and strain and begging me to see her again. I was surprised that the change came so soon. I thought that she would have at least a few days of relaxation and freedom from strain, but she had been at a bridge party after seeing me and something had happened to her during the course of the evening which brought her quickly to me the next day.

I feared that it would worry her if she could not do so well during her second treatment with the large Snellen test card, so we worked together with another part of the method. This time we used fine print. I sat directly in front of her as she looked at the little card with fine print, but it was pitiful to see her staring at it, trying to read. Staring is such a common thing and most people stare unconsciously at times. A great many people stare unconsciously most of the time and cause much or all of the discomfort which soon brings on chronic trouble with the eyes and sometimes causes blindness. If school teachers were instructed to remind pupils at intervals during the daily sessions of the permanent punishment to their eyes as the result of staring, it would be avoided in time and less eye glasses would be prescribed for school children.

People do not wait until they are physically tired out before they sit or lie down to rest, but most people do not know what to do about their eyes when they are mentally tired. In some cases just closing the eyes frequently for a second or two is all that is necessary to retain good vision for life. This I know to be true because my grandmother who lived until she was 79 years of age did not wear glasses at all until she was over 70 years of age and then they were not fitted by an oculist, but were purchased at the price of ten cents from a solicitor who came to her door. She used them only when threading a fine needle. Without glasses, she could see fine stitches while sewing, whether the thread was black or white. What I particularly remember was that she blinked her eyes often, which I thought at the time was a mistake or an affliction, but since I have become Dr. Bates' assistant, I know that she was doing the natural thing.

If all mothers would watch their babies as they begin to notice things and avoid any possible stare by just attracting the baby's attention to various things instead of just one thing, I believe that a great deal of squint could be avoided, as well as other eye troubles. Of course there are squint cases which have been brought on through illness or injury of some kind, but even these cases can be eventually cured by teaching the patient how to shift and blink and avoid the stare.

I informed this patient that her principal trouble was staring and that I noticed it more on her second visit than I did at the first. She was told to close her eyes and while they were closed to remember a white cloud or a piece of white cloth, such as her handkerchief, which was in her lap at the time, then to open her eyes and instead of looking directly at the fine black print she was to look at the white spaces, and then close her eyes again and imagine them as white as her handkerchief.

She said she could remember a white cloud much better while her eyes were closed. While looking at her handkerchief she could see it perfectly white, but when she closed her eyes the memory of the white handkerchief was not so good. She said the whiteness became sort of gray or a soiled white, which made her uncomfortable while her eyes were closed. This proves again that Dr. Bates is right in saying that an imperfect memory of anything brings on strain and imperfect sight.

At first she could not do so well with the white spaces of fine print as she held the card six or eight inches from her eyes. We tried the other extreme then by placing the card close to her forehead, too close for her to read the

fine print, even if she had no trouble with her eyes. She was directed to move the card slowly, slightly touching her forehead over the bridge of her nose and opening her eyes with the slow movement of the card and closing them again. In this way she got flashes of the white spaces, and as she closed her eyes the memory of the white spaces improved so that when she drew the card away finally after practicing this method for ten or fifteen minutes she could read the fine print at six inches as well as she could at twelve inches. Again she became excited as she did the day before and felt that at last she had grasped the idea of avoiding the stare and that she would not need to come again.

Two days later she telephoned me for another treatment, saying that she could not retain the good sight that she had while practicing with me. When she came for her third treatment, I tested her sight with the large test card, using various cards that I had. She did very well with the two cards she had read at her first visit, but with the strange cards her vision was the same as it was during her first visit, 15/20.

I decided to try a different method of treatment by having her imagine that my room was her tea room. A desk and small table with a few chairs were imagined to be tables at which she was to place imaginary patrons who were coming toward her. She told me that it was customary for her to have a napkin in her hand which served sometimes to wipe the top of a glass or to re-arrange a plate on the table. I gave her a towel to hold which served as a napkin and told her to shift from the napkin to the imaginary table, and in this way she learned how to shift and blink as she would have to do to retain her relaxation while at work in the tea room. She remembered this lesson very well and did her work in the tea room better for a few days.

When I saw her again, which was in less than a week's time, she said that she got along splendidly in the mornings, but in the afternoon after she had been busy for part of the day, she felt a strain coming on as usual, which caused a great deal of tension at the back of her head.

The method that we used that day at her fourth visit was used again at her last visit, the fifth treatment, when she did so well that I thought it unnecessary for her to come again. There were several pictures hanging on the wall of my room distributed in different places. I told her to imagine that she was in her stockroom where canned goods were stored. She explained how there were rows of canned tomatoes, which had the picture of a red tomato on the label. Then there were other shelves arranged with cans of peas, which, of course, were green. There were shelves in another section of the room with canned vegetables, with various colored labels. I told her to stand in the center of the room and to sway her body from left to right, blinking as she swayed and shifted from the canned peas to the canned tomatoes and other canned goods with various colored labels. She remarked that if she could keep up that good feeling of relaxation and freedom from tension and strain while she was practicing in the stockroom of her establishment, she would be amply repaid for the time she spent with me.

Her report over the telephone a few days later was favorable. She said that she had taken her car with friends and had driven many miles over a mountain trail, and if it had not been for her ability to blink and shift, she could not possibly have avoided an accident which would have thrown her car over the cliffs. I had told her to occasionally shift from the speedometer to the center of the road ahead and vice versa. I told her to remind herself continuously that it was not necessary to hold on very tight to the steering wheel, but to hold it loosely, which meant relaxation.

She said that her storeroom, she believed, was responsible for the absence of strain and tension late in the afternoon, when before she had seen me there was not a day that she was free from pain in the back of her head. She wore a fancy white apron during business hours, but always in the little pocket of her apron rested the small test card and a small fine print card which she would use when she had the opportunity to do so, practicing shifting from the white spaces of the fine type to sections of the room, which helped her to see things clearly and without strain. Carry a small rock or piece of jewelry, any colorful, shiny object with a lot of fine details. Shift on the details, colors, sparkles. Relax, blink, let the head, neck, shoulders relax, think something happy. This keeps close and distant vision clear.

I hope this article will be of benefit to those who do close work in offices, as well as people who do similar work to that of my patient.

### **Case Report.**

As is generally known, fevers of all kinds are apt, if not treated with the utmost care, to result in defective eyesight, hearing and many other troubles, and it was at the age of six years, after severe scarlet fever, that my eyes became weak, and subsequently developed a convergent squint. In order to check this defect, it was found necessary to harness me to a pair of huge unsightly spectacles, with the usual thick corrective lenses. As a result of this drastic treatment my eyes weakened still more, becoming myopic and astigmatic, although the squint had certainly improved, but only at the cost of producing the other complications, for exceptionally strong lenses were used to this end.

I continued to pay periodic visits to the best available eye specialists in Johannesburg and Capetown, South Africa, all of whom at first encouraged me into the belief that eventually I would be able to discard them. Latterly, however, I received no such encouragement, but instead was warned that blindness could result if I went without them at any time. I reached the age of 26 years without having received any benefit from the wearing of glasses. In fact even more technical terms were introduced into the condition of my eyes, and I had come to the conclusion that nothing could be done for them, and that I would always wear glasses, and that continuous headaches were my lot. Such a dreadful state of mind for any one to get into!

Imagine my joy when at a tea party (they have their uses after all) I heard Dr. W. H. Bates' name and methods of treatment mentioned for the first time; that was in 1926, and of course anything to do with the eyes attracted my attention at once. At that time a Ms. Reid and Mr. Jardine, both students of Dr. Bates, had been carrying out exceptionally good work with the Bates Method. I immediately consulted with them, overlooking entirely the fact that at that time I had a great deal of work to do which would require the use of my eyes. The first thing I was told to do was to remove my glasses, and not to wear them again, and my implicit obedience in this regard surprised even myself, for since then I have never returned to my glasses. To Mrs. Reid and Mr. Jardine I am forever grateful for what they did.

I think what caused me to put such faith in Dr. Bates and his methods was the fact that I had been going to eye specialists for some twenty years, and instead of my eyes being benefited, they became steadily worse, which fact coincided with one of his observations.

I carried out the various exercises prescribed, under somewhat difficult circumstances, my entire day being consumed with office work. However, this did not deter me, for I did the modified sway while sitting at the typewriter, got into the habit of blinking, and snatched a peep at the sun as many times a day as time permitted, morning and evening. I palmed my eyes in between, for, understand, at this time my eyes were being called upon to do work which they had never done before. It was indeed a hard and uncomfortable period through which I was passing. In addition to all the relaxation exercises, I did physical exercises to keep me generally fit, and this helped greatly.

After three weeks, quite by accident, one day, I began to realize the value of relaxation, for up till then I was undergoing too much of a strain; from this time on I steadily improved. Of course I realized that after having worn glasses for twenty years I couldn't expect to be cured immediately and that it would be only by hard work and patience that eventually my eyes would be normal.

I became absorbed in this treatment, and felt that a great deal could still be learned. The fact that my own eyes were not yet normal, urged me to learn more of the methods of treatment by this wonderful system. When in London, I received more benefit from Mr. Price, another student of Dr. Bates, to whom I am very grateful. I feel that if all the followers of Dr. Bates, and there are many, would co-operate, and perhaps pool the knowledge acquired by experience, we could help this treatment to spread throughout the world. What a benefit this would be to humanity at large!

Helen Kupferburger.

#### **HOW TO OBTAIN PERCEPTION OF LIGHT IN BLINDNESS.**

Two things have always brought perception of light to blind patients. One is palming, and the other is the swing.

The swing may take two forms:

1. Let the patient stand with feet apart, and sway the body, including the head and eyes, from side to side, while shifting the weight from one foot to the other.
2. Let him move his hand from one side to the other in front of his face, all the time trying to imagine that he sees it moving. As soon as he becomes able to do this it can be demonstrated that he really does see the movement.

Simple as these measures are, they have always, either singly or together, brought relaxation and with it perception of light, in from fifteen minutes or less to half an hour.

In palming, the patient should remember that this does not bring relief unless mental relaxation is obtained, as evidenced by the disappearance of the white, grey and other colors which most blind people see at first with their eyes closed and covered.

## **BLINDNESS: ITS CAUSE AND CURE. By W. H. Bates, M. D..**

As ordinarily used, the word blindness signifies a degree of defective sight which unfits the patient for any occupation requiring the use of the eyes. Scientifically it means a state in which there is no perception of light. Speaking of this condition in his Cause and Prevention of Blindness Fuchs tells us that except in extraordinarily rare cases it is incurable, and this is the accepted opinion of ophthalmology today

The facts that have come to me during thirty-five years of ophthalmological practice have convinced me that the above statement should be reversed, and made to read: "Except in extraordinarily rare cases blindness is curable." In fact, unless the eyeball has been removed from the head, I should be unwilling to set any limits whatever to the possibility of relieving this greatest of human ills, for I have never seen a case of injury or disease of the eye which was sufficient to prevent improvement of vision. In all cases of blindness, whatever their cause, a mental strain has been demonstrated, and when this strain has been relieved perception of light has always been obtained.

Even when the eyeball has been so shrunken that the patient scarcely seemed to have an eye, sight has been restored. In one such case the cornea of the left eye had shrunk to an eighth of an inch in diameter and only a suggestion of the sclera was visible, while the right eye was reduced to a quarter of its normal size and showed only a hazy cornea and a blurred piece of iris with no pupil. The patient was ten years old and the condition of her right eye was congenital (present at birth): that of the left was due to an inflammation which she suffered when she was a year old. From that time, she had had no perception of light; but in fifteen minutes she became able to see the furniture of the room indistinctly and to imagine that it was swinging. In spite of this remarkable demonstration of what could be accomplished by relaxation, her parents did not bring her again.

Atrophy of the optic nerve is one of a considerable number of diseases, like detachment of the retina, irido-cyclitis and absolute glaucoma, which have been placed beyond the pale of hope by the science of ophthalmology. Yet persons with atrophy of the optic nerve sometimes have normal vision, and persons blind from this cause sometimes recover spontaneously. At the New York Eye and Ear Infirmary thirty years ago, a patient was exhibited who had all the symptoms of atrophy of the optic nerve, but who nevertheless possessed perfect sight. The case was exhibited later at the Manhattan Eye and Ear Hospital, the New York Ophthalmological Society, and the Ophthalmological Section of the New York Academy of Medicine. Later I saw several similar cases; but when a colored woman came to my Clinic a few years ago with atrophy of the optic nerve, it did not occur to me that it would be possible to help her. Not knowing what to do, I asked her to sit down while I attended to some other patients, and meanwhile my assistant, Mrs. Lierman, who tells the rest of the story in a later article, got hold of her and made her see. Later many cases were relieved. A few obtained normal vision, but most of them did not have the courage to continue the treatment long enough for this purpose.

A few weeks ago a patient came to me completely blind in both eyes from atrophy of the optic nerve. Before he left the office he had become able, by the aid of the swing, to see the light with both eyes. He went away greatly encouraged, and promised to come again as soon as he returned from a neighboring city. Later he sent me a statement, signed by an oculist and witnessed by a notary public, to the effect that he was completely and incurably blind from primary optic atrophy. I have not seen him since.

The following remarkable story of a spontaneous cure was told me recently by a patient: A commercial traveler, a friend of the man who told me the story, was treated for two years in a Chicago Hospital for total blindness from atrophy of the optic nerve. Although the doctors told him that his case was quite hopeless, he refused to believe it. He talked much of a grey cloud that he had seen before his eyes at the time he became blind, and said that if he could only remember how it looked he was sure it would help him. One day he had a perfect mental picture of that grey cloud, and at once he found that he could see. He is now back in his old position, doing his usual amount of work, attending to his correspondence, and reading as well as he ever did. Doctors who have examined his eyes since say he still has atrophy of the optic nerve and ought still to be blind.

Irido-cyclitis, a combined inflammation of the iris and ciliary body, is a frequent cause of blindness. Often it results from an injury to the adjoining eye, and in that case is known as sympathetic ophthalmia. In severe cases it is believed to lead inevitably to blindness, which is, of course, thought to be incurable. Yet in all cases in which blindness has resulted from this disease I have seen perception of light, and even normal vision, restored.

One day a young girl came to my Clinic with one eye as soft as mush from irido-cyclitis (the other having been removed four years before). The iris and pupil were covered by a white scar and she had no perception of light. After palming, swinging and using her imagination for about fifteen minutes, the scar cleared up sufficiently for me to see the iris and pupil indistinctly, and two visiting doctors also saw them, while the patient saw the light.

Later she became able to see people on the street and to see the pavement and imagine that it was swinging. At that point she ceased coming to the Clinic.

A case of practical blindness from this cause was cured within a month by the use of the imagination. When the patient looked at the large letter at the top of the card at one foot and was told what it was, he was able to imagine that he saw it, and thus he became able to see it actually. Then he did the same thing at ten feet. Next he imagined that he saw the first letter of the second line at ten feet, and became able to recognize the second letter. The same method was used with all the other lines until he became able to imagine the first letter of the bottom line, and then go on and read the other letters.

When his eye was examined with the ophthalmoscope the vitreous was so opaque that one could not distinguish the optic nerve and retina. He said that the light bothered him, and prevented him from imagining any of the letters on the Snellen test card. With the retinoscope at six feet, however, he stated that the light did not bother him so much, and he was able to imagine, while it was being used, that he saw a letter on the bottom line perfectly. The refraction was then normal, and a clear red reflex (light reflected from the retina) was obtained, indicating that the vitreous was now quite clear. When he failed to imagine that he saw the letter, the reflex was much blurred, indicating cloudiness of the vitreous. These are facts. I cannot offer any explanation for them.

Of detachment of the retina Fuchs says, "It is generally possible in recent and not too excessive cases of separation of the retina to obtain an improvement of the sight by a partial attachment, and in especially favorable cases even to cause the detachment to disappear completely. Unfortunately it is only in the rarest cases that these good results are lasting. As a rule, after some time, the separation develops anew, and ultimately, in spite of all our therapeutic endeavors, becomes total ... In inveterate cases of total detachment it is better to abstain from any treatment." Compare this statement with the results obtained by central fixation, as told in the following article. In many other such cases useful vision has been obtained.

The incurability of blindness resulting from glaucoma is taken so completely for granted that Nettleship defines absolute glaucoma as "glaucoma that has gone on to permanent blindness." Yet in the December 1920 issue of *Better Eyesight*, and again in this issue, is reported a case in which light perception was restored in an eye stone blind with glaucoma after a few minutes of palming. This was witnessed by several visiting doctors. Later the patient became able to read the twenty line at ten feet with this eye. As nearly half of our blind population at the present time is believed to be over sixty years old, and a great part of the blindness of later life is attributed to glaucoma, the curability of this condition is a fact of immense importance.

Statistics indicate that in this country, at the present time, external injury is the most frequent cause of loss of vision between the ages of twenty and thirty-four. I believe that a great part of this blindness could be relieved, for, as I have already stated, I have never seen an eye so badly injured that its vision could not be improved. To cite only one of many similar cases, a patient injured in an automobile accident became suddenly and completely blind, either from hemorrhage into the orbit, or from injury to the optic nerve. By palming and the use of his imagination, he at once became able to count his fingers.

Perhaps the most remarkable cures of blindness are those in which the loss of vision is supposed to be due to general disease. These have frequently been relieved, partially or completely, without relief of the disease.

Thirty years ago a man stone-blind with what I diagnosed to be albuminuric retinitis was led into my Clinic at the New York Eye and Ear Infirmary. This condition is so closely associated with disease of the kidneys that its existence is considered sufficient evidence of the existence of the latter. Yet the patient regained normal vision and held it up to the time of his death without any improvement in the condition of the kidneys. On the contrary the disease of these organs became worse, and when he died a few years later the physicians who performed the autopsy wondered how he had been able to live so long. The evidence seems to me complete that the blindness was not due to the kidney trouble but to strain.

Many diseases of the eye are attributed to syphilis. Yet in every case these conditions have been relieved by rest, and often the sight has become normal without any improvement in the syphilis.

In spite of the very prompt improvement which patients obtain in these cases, they often, as the cases mentioned in the foregoing pages show, fail to continue the treatment. The weight of public and professional opinion is too much for them, and they are practically compelled to take this course. Such dogmatism is both unwise and unscientific. The causes of disease are obscure and variable, and we do not know it all. It does not seem to me that a doctor is justified in telling a patient that he is incurable just because he has never seen such a case cured, or has forgotten, because it was contrary to rule, any case that he has seen. This may cause the patient to accept as inevitable a condition which might have been cured and may even prevent nature, because of the depressing effects of discouragement, from doing what the doctor has failed to do. Still less is it justifiable for the medical profession to assume, as it now seems to do, that we have learned all there is to be known about blindness. Such an attitude throttles research and actually exposes to the suspicion of being a quack any man who tries to help these unfortunates.

## **RELIEF OF RETINAL DETACHMENT. By Clara E. Crandall.**

Twenty-five years ago Samuel D. was struck in the left eye by a nail thrown carelessly from a roof, and nineteen years later, while he was chopping wood, a stick flew up, hitting him in the face and injuring the same eye. There were, apparently, no serious consequences from either of these accidents, but about a year after the second one the patient noted that his sight was getting dim. He consulted an oculist, thinking that he probably required glasses, and was told that he had iritis. He was given drops for this condition and had been using them for a month when, on May 12, 1916, while digging in the garden, he went suddenly and completely blind in his left eye. The cause proved to be a detached retina, and the oculist whom he consulted sent him to a hospital where he underwent a thorough examination. His teeth were X-rayed, and it was thought best to remove his tonsils. He was then kept for eight weeks motionless, flat upon his back.

At the end of this time it was found that the retina, as a result of the complete rest, had become partially reattached and the vision was, to some extent, improved. Hoping to improve it still further, the doctors operated upon the eye, but without success. Two weeks later a second operation was performed, after which the eye became totally blind again. The condition of the left eye was complicated by a traumatic cataract, and senile cataract now developed in the right. He was sent to another hospital in the autumn where he was again thoroughly examined, but the doctors decided that nothing more could be done for him.

And so, with one eye totally blind and cataract rapidly obscuring the sight of the other, Samuel went back to his work as a gardener, trying to resign himself to the dark future before him. From month to month he struggled on; but he found it increasingly difficult to do his work, and felt that the time would soon come when he would have to give it up. He suffered greatly from the strain of trying to see and complained of a constant yellow glare in the blind eye, together with many other painful and unpleasant symptoms which, he said, interfered with the sight of his right eye also.

From a time several years antedating his sudden attack of blindness Samuel has been in the employ of my family. After he became blind I went to Dr. Bates to have some eye troubles of my own treated, and, hearing of the many remarkable cures that were effected by his method of treatment, it occurred to me that he might be able to do something for Samuel. It seemed to Samuel a forlorn hope, but as it was the only one, he allowed me to take him last May to Dr. Bates' Clinic in the Harlem Hospital.

At this time he was still without light perception in the left eye, and with the right was unable to make out the smaller letters on the test card when it was held a foot from his face, while even the largest letters appeared gray and blurred. Dr. Bates told him that the cataracts could be cured, and encouraged him to hope for improvement in the condition of the detached retina also. He told him to leave off the dark glasses he had been wearing, to palm as often and as long as possible, to drink twelve glasses of water a day, to imagine and flash the letters on the Snellen test card, and to imagine everything, himself included, as swinging.

Samuel followed these instructions conscientiously, and in a short time the strain and other distressing symptoms from which he had previously suffered were greatly relieved. The sight of the blind eye improved gradually. At the first visit he became able to distinguish light, and later he saw the shadowy image of a moving object, at first only when held close to the left side of his head, but afterward in all parts of his field of vision.

The perception of light in the blind eye has grown steadily and the vision has so improved that now, at a distance of fourteen feet, he can see a moving object against a strong light, while at the near point he even thinks that he can sometimes catch a glimpse of the large letter on the Snellen test card. With the right eye he can read the smallest letters on the test card at the near point, and they appear black and distinct. At fourteen feet he can flash them.

Among those who have benefited by Dr. Bates' remarkable discoveries, there is no one who owes more to them than Samuel D.; for now, instead of having to look forward to blindness and utter dependence on others, he has been enabled to take up his life with renewed courage and interest, confident that if he faithfully continues the treatment he will eventually obtain good vision in both eyes.

## **STORIES FROM THE CLINIC. No. 13: The Relief of Blindness. By Emily C. Lierman.**

Clinic day is always a happy day for me. It is true one sees at the hospital a great deal of suffering, sorrow and poverty; but it is a pleasure to be able to relieve some of the suffering, and sometimes things happen which are very amusing.

Some time ago a blind man was led into the Clinic by a friend. This was a case which really ought to have been very sad, but it turned out, instead, to be very amusing. In spite of his affliction the patient seemed to be in a happy mood and very well-pleased with himself. He was neatly dressed and his shoes, though worn, were

carefully shined, while over them he wore spats. His tie was a very bright red, and his hat was a light shade of tan. A cane, which his blindness compelled him to carry, completed a costume which I am sure he considered to be that of a real swell gentleman. When I approached him he said in a very gracious manner:

"Glad to see you, ma'am! Glad to see you, ma'am!"

And yet he could not see me, as I soon found out. I held my fingers before his eyes and asked him if he could see them. He answered that he could not. Further tests showed that he had no light perception whatever, and Dr. Bates said that his condition was due to atrophy of the optic nerve. I showed him how to palm, and after five minutes he pointed to an electric light in the ceiling and said:

"It looks light there."

I told him at once to palm again, and when he opened his eyes he saw the shadow of my fingers moving from side to side before his face. In a few moments, however, the blindness returned. Again I told him to palm, and while he was doing so I asked him if he could remember something black, or something else that he had seen before he became blind, such as a beautiful sunset, or white clouds. He thought a while, and then remembered that in the days when he had been a house-painter he had used black paint. I told him to remember the black paint while he was palming, and then I left him to attend to other patients. When I came back to him I held two of my fingers close to his face, and asked him if he could see them.

"Ma'am " he said, "I'm not at all sure, but I think I see two fingers."

I think the man must have been quite popular with the ladies, for he now remarked that one of his lady friends would be pleased if he could see her. He came quite regularly for a time, and each time I noted improvement in his vision. Sometimes this was not very marked, and then I knew that he had not been palming very much at home. He was greatly helped by the focusing of the sun's rays upon the white of his eyes with a sun glass. This had a very soothing effect.

He was soon able to dispense with his guide and, when leaving the Clinic, used to use his cane to obviate collisions with the benches, nurses and patients. One day as he was leaving the room Dr. Bates called my attention to him, and I noted that instead of tapping with his cane upon the floor he was carrying it on his arm. With head erect, he walked down the long corridor, opened the door and left the hospital, with apparently no more difficulty than a person with perfect sight. A little later he came with the cane. He became able at last to read the fifty line at five feet with both eyes, and then he stopped coming. Probably he thought he would be able to continue the treatment by himself.

In the October (1920) number of *Better Eyesight* I wrote about another case of blindness from atrophy of the optic nerve, the patient having no light perception. Unlike the preceding patient she was very much depressed by her condition, and begged me piteously to give her back the light of day. She had heard of our Clinic through some of the patients, and had confidence that Dr. Bates or myself would give her some relief. But I was very far from feeling this confidence. Sometimes I am a doubting Thomas. I always try, however, not to reveal this fact to the patients, but simply go ahead and do the best I can. After this woman had palmed for ten minutes or longer, all the time remembering black stove polish, she became able to see the 200 letter a foot in front of her eyes. Since my previous article was written she has become able to read the ten line at this distance. She is able to go out to work during the day, and to work for herself at night, and she says she sleeps better.

In the December (1920) number I told the story of a woman who had absolute glaucoma of the right eye. This meant that she was stone blind. She was also suffering terrible pain in this eye. I had to do a great deal of coaxing to get her to palm, but I was willing to give her more time than I do to most of the patients, because her age was seventy-nine. With the exception of one or two relapses she got on nicely, and the last time I saw her she had half-normal vision for distance in the once blind eye and normal vision in the other. She had learned how to keep her eyes at rest by palming and using her imagination for flowers and other objects, and this relieved the strain which had been the cause of all the trouble.

We have had many cases of total blindness at the Clinic, most of them due to glaucoma and atrophy of the optic nerve, a few to detachment of the retina and irido-cyclitis, and all have gained at least perception of light, while many have been more materially benefited. But most of them did not come more than a few times. It is unfortunate that the blind, as a rule, consider their condition so hopeless that it is difficult to convince them that any treatment is worthwhile, even after they have received some benefit from it.

**Hypermetropia. (Unclear Close Vision, Farsight). By W. H. BATES, M.D..**

THE importance of hypermetropia cannot be overestimated. It is sometimes acquired soon after birth, or it may be manifest at ten, twenty, thirty, or forty years of age. Eighty percent of eye troubles are caused by hypermetropia, while near-sightedness occurs in ten percent. There are only ten percent of normal eyes. These figures are startling. The majority of persons at the age of forty-five or over acquire hypermetropia, and it is of the utmost importance that such cases be carefully studied.

Nearly everyone has the symptoms of hypermetropia. When the sight is good for distant vision, that does not necessarily mean that the sight is also good for reading at a near point of ten or twelve inches. Too often such cases are not treated seriously. Poor sight for reading (hypermetropia) is usually corrected by the use of reading glasses, while vision at all other distances is neglected.

In middle age, serious eye diseases are caused by hypermetropia. Among the most common are glaucoma, cataract, and diseases of the optic nerve and retina. In the early stages of these serious diseases, they are more readily curable than after they become chronic and more serious, because the vision is only slightly affected and the treatment which cures hypermetropia is the treatment which prevents serious eye diseases. Cataract and glaucoma are now being prevented or cured by treatment which cures hypermetropia. It should be emphasized that early treatment of hypermetropia yields quicker, more continuous results than later treatment.

Eye physicians or ophthalmologists have almost universally believed that absolute glaucoma is not curable by any form of treatment. It has been demonstrated that glaucoma is caused by strain—the strain of hypermetropia. When this strain is relieved or corrected, glaucoma usually improves. This treatment is more successful than operation or eye drops. It is only in the last ten years that it was discovered that glaucoma is caused by a strain which produces hypermetropia and that when this strain is relieved the glaucoma improves.

I think it is a mistake to condemn this simple method of relieving the hypermetropia, which also relieves glaucoma. The eye strain which produces hypermetropia also produces cataract.

It has been repeatedly demonstrated that in all diseases of the eyes which cause imperfect sight, the eye is under a strain and when this strain is removed all diseases of the eye are benefited. Patients with atrophy of the optic nerve have good sight when eyestrain is not present. For example, a patient came from Austria for treatment of amblyopia which was so advanced that the vision in one eye was only perception of light and in the other eye it was one half of normal. She had consulted many physicians who advised operation for the cure of the total blindness. She was given the hypermetropia treatment daily for about two weeks, at the end of which time the vision was normal in both eyes. Surely if hypermetropia treatment can be so beneficial, more physicians ought to know about it. There have been numerous similar cases.

It can be demonstrated that atrophy of the optic nerve can be caused by the eyestrain of hypermetropia.

Palming, swinging, central fixation have always improved the sight temporarily or permanently. It is interesting to prove that such a disease as atrophy of the optic nerve can be benefited by the treatment which relieves hypermetropia.

Patients suffering from squint are benefited by hypermetropia treatment. Patients with hypermetropia not only strain to produce squint with one or both eyes turned in, but they also strain to correct the imperfect sight which is caused by the squint. This fact should be more widely known, because even at this time many physicians believe that the poor sight caused by hypermetropia is incurable. (Two types of strain combined. One type of strain can lead to a secondary different type of strain.)

What is the lowest degree of hypermetropia that can be produced? is a question that has been asked. The answer is that there is no limit, not only to the low degree of hypermetropia, but there is no limit to the high degrees. In other words, by an effort hypermetropia of thirty diopters or more can be produced and, by treatment, perfect vision can be obtained just as readily.

In studying the production of high or low degrees of hypermetropia it is interesting to discover the conclusions of well known ophthalmologists. One prominent doctor was asked this question: Is hypermetropia curable? He replied that it was not curable. He was then asked, "Why do you claim that no one can cure hypermetropia?" He answered, "I know that it cannot be cured because I was unable to succeed and if I cannot succeed no one else can."

Massage of the eyelids has been recommended for the cure of hypermetropia. Another doctor claimed that he was able to cure a majority of the cases of hypermetropia, and that if the patient was not cured by massage, no other doctor in the world could succeed. Other physicians, however, did not believe that massage was a cure for hypermetropia.

Since hypermetropia is so common and produces so many different kinds of eye trouble—imperfect sight, pain, dizziness, and other nervous symptoms to a greater extent than do other errors of refraction—it is well to understand as much as we can of the occurrence, symptoms, prevention, and cure of hypermetropia.

The best methods of preventing hypermetropia are the sway, reading fine print such as diamond type, palming occasionally, and imagining stationary objects to be moving when the eyes move in the same or opposite

direction. (oppositional movement) The last one of these methods is not always easy to practice. Some cases are very obstinate without any known reason. They may try for days, without success, to imagine stationary objects to be moving. The cause of failure is usually due to concentration, staring, looking fixedly at stationary objects, and efforts to try to see.

When success is not attained, hold the finger about six inches from the chin while looking at distant objects and move the head and eyes from side to side, taking care not to look directly at the finger. When this movement of the head and eyes is practiced easily, continuously, the finger appears to move in the opposite direction. This method is called the variable swing and most people have no trouble whatever in imagining the finger moving. The length of the movement of the finger is much wider than stationary objects regarded at ten, twenty, or forty feet or farther. (Distant objects appear to move with the eyes in the same direction.)

Another case of failure occurs when the patient turns the head to the right and simultaneously turns the eyes to the left. It is a very painful experience. When one fails to obtain movement of stationary objects with the variable swing, he suffers much pain, dizziness, and other nervous symptoms.

Hypermetropia may be prevented by many other methods. The memory or the imagination of perfect sight prevents hypermetropia in the normal eye. The memory of imperfect sight is very difficult and the memory or imagination of perfect sight is easy.

In the city of Chicago a school teacher developed a method of treating children which prevented hypermetropia from being acquired. She had charge of about fifty or more children at the age when fatigue is common. As a result, all the teachers in the Chicago school allowed their children to rest for a time at frequent intervals—about every half an hour in two. (in two – misprint?) They were taught relaxation methods, although they were all under ten years of age. It was astonishing to observe how much they could remember, how much they could imagine, and how much their activities were improved with benefit to their eyes. Sometimes the usual exercises in the class room would be stopped and the children would be taught how to palm successfully and while palming to improve their imagination. They were taught to draw pictures which they copied from the blackboard twenty feet away. After some months, the hypermetropia was improved and finally entirely cured. A school teacher in Long Island was treated by me for compound hypermetropic astigmatism. By the use of relaxation methods the hypermetropia and astigmatism were corrected and the patient obtained normal vision. The hypermetropia was prevented from increasing by curing it. The patient was very much pleased with the results and told the principal of her school that because hypermetropia was curable, it was also preventable. A negative proposition cannot be the truth. Hypermetropia could be prevented when it was found possible to cure it.

A number of teachers became interested and all those wearing glasses for hypermetropia were cured either by palming or swinging or by the memory of fine print. The principal was much pleased and placed a Snellen test card in all the cases rooms with directions that it should be read by all the teachers and pupils who were afflicted with hypermetropia. The first patient cured of hypermetropia was to continue the work.

Since she could not treat patients in the class rooms, she decided to treat them outside the school building. She made an arrangement with the teachers who wished treatment that she would teach them how to use their eyes properly and prevent or cure hypermetropia. She made arrangements with them all that after a teacher was cured, she would agree to teach, cure, or prevent some other teacher from acquiring hypermetropia. So much interest was shown by the teachers in this school building that it made an endless chain and a great many teachers and school children were cured of hypermetropia.

For many years, it has been believed that retardation is incurable. It seemed wrong that children, fifteen or sixteen years old and older should be kept in the grades with children ten years old or under. These children did not like to study. Many of them complained of severe headaches and other discomforts. Truancy was common. After retardation was cured by relaxation methods, most of the children started in and worked hard with their studies, with the result that many of them graduated into the rapid advancement classes.

I was told by many principals that imperfect sight was never found in the rapid advancement classes. Nearly all cases of retardation were suffering from hypermetropia. It was demonstrated that patients suffering from imperfect sight from any cause were also suffering from retardation. The teachers who devoted an hour or more every day to the cure of hypermetropia discovered much to their surprise that almost every disease of the eye and nervous system was benefited or cured by treatment which cured hypermetropia.

In one year, 20,000 pupils suffered from pain, headache, loss of memory, imperfect sight from hypermetropia. In one year after, 80 percent of the 20,000 children who were suffering from headaches and other nervous troubles all recovered after the hypermetropia was cured.

Reading fine print improves eye muscle relaxation, function, coordination, shape of and normal pressure on/in the eye, central fixation, shifting resulting in improved circulation of blood, fluids in the eye resulting in healthy eyes and clear close and distant vision.

## **Christmas 1928. By EMILY A. Bates.**

AS I began to write my Christmas story, a sense of fear comes over me that I might forget to give credit where it is due, or to omit some important detail which helped to make our Christmas party, I think, the best we ever had, I should say "parties," for there were three of them.

One party was held at the office of a doctor here in New York, who specializes in ear, nose, and throat work. This doctor, with his untiring efforts, has saved the lives of many children who were suffering from a stoppage of the throat from diphtheria or some other diseases which affected the larynx and trachea. It doesn't matter what hour it may be, he is always ready to respond to a call at a time when other doctors are asleep. Both he and his nurse deserve only the highest kind of praise for the wonderful work that they are doing. Along with his private practice, he has a host of charity cases; among them are children of the slums, who would not be alive today if it were not for his skill.

The doctor's nurse gives untiringly of her time to the children who need her special care. In her kind, quiet way she explains to some patients how necessary it is to be clean. Most of these patients are little soldiers and never tell the doctor during their treatment whether it hurts or not. He knows and so does the nurse, so after the treatment is over they are usually repaid for their courage with good things to eat.

In the group assembled at our Christmas Festival were children between the ages of six and sixteen. The younger children all believed in Santa Claus and were anxious to know what he had brought for them. Mothers of some of them were present, and they shared in what there was to give.

We were quite certain at the Christmas party that the doctor was the happiest of the group. The large dining table was filled with tempting things to eat, and our Christmas fund provided all of his charges with useful gifts. Each of the boys over ten years of age received the usual necktie. Each of the younger boys received a mechanical toy of some sort, while each of the little girls received a doll; purses were given to the older girls. Boxes of good candy from Loft's, oranges, and apples were provided for all, including the mothers.

One of the poor patients of our own clinic, a woman whose sight was so impaired when she first came to us that she could not make her living, placed an envelope in the hand of our assistant, Miss Hayes, and said: "It is only a little that I have to give, but let me help someone less fortunate than I am, and you and Mrs. Bates will find that someone much better than I can." She made me think of "the widow's mite" and how much it meant to the greatest Teacher this world has ever had. When we opened the envelope we found not a mite, but ten dollars. This woman had had what is known as compound myopic astigmatism. Her eyes at times were much irritated and the pain she suffered prevented her from doing any sort of work. She came for two years off and on and during the last year was able to earn her living again. When she first came her vision with the test card was 10/70 in the right eye and 10/50 in the left; her vision at the near point was also very poor and she had been obliged to wear glasses when she attempted to do any close work. When we last saw her, her vision had improved to 10/10 in each eye and she was able to read No. 15 on the Fundamental card at eight inches from her eyes. She no longer wore her glasses and she said that the pain from which she suffered had entirely disappeared.

Although I am usually at the office during clinic hours, the Doctor's work keeps me in other parts of our office during clinic time each Saturday morning. Miss Hayes deserves all the credit for the cure of this poor woman, as well as other cases. Not once has she failed us in taking care of her charges and the many cases which have been treated and permanently cured by her are more than grateful.

The poor woman was very happy when she learned that her money was spent to make not only one, but eight unfortunate boys, happier than they had been for a long time. These boys had their first real Christmas party in all the years of their confinement in the Home for Feeble Minded. The one who had charge over these boys was a Bates' student. She came first to Dr. Bates as a patient and after she was cured she studied the method so that she could help others. Fate and good fortune brought her to this Home for the Feeble Minded in Thiells, N. Y., where hundreds of boys and girls and men and women are confined because their minds are not normal. The eight boys who were made happy because of our Christmas fund were between the ages of seventeen and twenty years of age, but their minds were like those of little children at the age of eight years or younger. Time and again those who took care of them left because the strain was too great. Others who were less tender hearted did not handle the boys properly, which did not aid in the improvement of the minds of these poor unfortunates.

For no other reason but to be of good service Miss Anna Woessner came to take charge and see what she could do for them. The boys responded quickly under her gentle treatment and care and changed in time from being destructive to being useful and willing to learn. Some of them had a constant desire to steal anything they could lay their hands on when she was not looking, but she did not lose patience with them or threaten them at any time. She studied their greatest faults and weaknesses and taught them right from wrong.

Although she did not mention to the heads of the institution the method that she was using to improve the

minds of her charges, she went about in a quiet way, teaching them relaxation and rest of the mind and body by using the Bates Method. She allowed them to come to her room after their work hours were over and encouraged them to read her test cards, teaching them how to rest their eyes by palming.

They would do anything to hear a fairy story, so while their eyes were closed and covered they sat quietly while she told them simple fairy tales. She taught them the long swing of the body, explaining how well the big elephant could do it and how restful and happy he was because it relaxed him. She explained that relaxation meant that he was on his good behavior when he did the long swing. Even though their simple minds did not grasp everything she told them, they at least understood what good behavior meant.

Miss Woessner's mother, one of the good old-fashioned kind one reads about, always had a package for her to take back to the home after her weekend visit with her family and friends. The package usually contained homemade jellies and home-made cake which the mother prepared, arranging everything temptingly for the boys. It was always a joy to the boys to see Miss Woessner return to them. When they did wrong, they were denied the good things which she had for them. When they repented and promised to do better next time, they were always forgiven and given their share of the contents of the package.

She taught them how to make flowers of tissue paper and being an expert herself at making wax flowers, she taught them how to do this also. Some of their work was placed on exhibition for visitors to see when they called at the home. When our Christmas package arrived for them, each boy received a tie as well as candy and oranges. One of the boys sent a letter which he had written all by himself; it was hardly readable, but expressed the gratitude of each one and the letter ended by saying that he was anxious that I should receive his most precious possession, a live "bunny rabbit," as a gift.

At our own Christmas party, which was held at our new offices, there were about eight children altogether. No partiality was shown among the children so the presents that were purchased for the boys were carefully chosen so that each one received a similar gift. The same thing was done in selecting the dollies for the little girls. The men received ties and the women handkerchiefs and purses. Our tree for the clinic family seemed more beautiful than ever; it was lit up with electric lights and placed in the reception room where everyone could enjoy it.

There was one old lady who was especially happy with her gift. She had saved up enough money from her husband's small earnings during the year to buy a much needed winter coat for herself; she had also managed to buy a cheap hat and now with her new purse, she had a complete new outfit. She had been coming to the clinic almost every Saturday for about a year. She had been suffering from cataract in both eyes; her vision was so bad when she first came that she was unable to come alone and had to be brought to the office by her sister-in-law. She was very much frightened the first day, because, not knowing very much about the Doctor's work, she thought that he might advise operation as had other doctors whom she had consulted. She was very much relieved when she was told that Dr. Bates did not operate and that he had cured cataract without operation or eye drops. She was ready to devote as much time as necessary to home practice.

She sat in the sun every morning for an hour or longer; she palmed or rested her eyes every hour for ten minutes and practiced the long swing every night and morning. When she first came, her vision was 10/200 in the right eye and 10/100 in the left. She complained of a mist before her eyes, which was becoming worse all the time. Dr. Bates examined her eyes several times during the year and each time found an improvement in their condition. The last time her vision was tested, she could read the line next to the bottom at ten feet (10/15) with either eye and the mist which had troubled her for so long had almost entirely disappeared. It was only when she strained her eyes that it would bother her and after she relaxed her eyes it disappeared. She stopped coming soon after Christmas, before she was entirely cured, but I feel sure that she kept up her practice at home.

Dr. Bates, Miss Hayes, and I wish to take this opportunity to express our gratitude to those who added to the clinic Christmas fund and helped to make our Christmas parties possible.

Notice.

Dr. Bates, as well as the Central Fixation Publishing Company, has been receiving a number of letters recently from people who have been unsuccessfully treated by practitioners who have not taken Dr. Bates' course of instruction and do not understand the Bates Method thoroughly.

Dr. Bates gives a course of instruction to doctors, teachers, nurses, and others who wish to practice his method professionally. At the end of the course the student receives a certificate authorizing him to help others by the Bates Method. Those wishing further particulars may obtain them by writing direct to Dr. Bates at 18 East 48th Street, New York City.

### **A Suggestion.**

A great many people who have been benefited by Dr. Bates' book, "Perfect Sight Without Glasses," Mrs. Bates' "Stories from the Clinic," or by "Better Eyesight," order copies of the books or subscriptions to "Better Eyesight" to be sent to some of their friends suffering from imperfect sight. Why not order books or subscriptions for some of your friends as a Christmas gift. We will mail books direct to the recipients, postage prepaid, and enclose your Christmas card.

### **Questions and Answers.**

Q—Would the reading of fine print at four inches be helpful?

A—The reading of fine print at four inches is usually helpful.

Q—You mention the black period in your book. Must this be any particular size? I only imagine large round black objects like cannon balls, the center of a target, or a moving football. This is restful, but is it beneficial?

A—No. Anything that is restful is beneficial.

Q—I have attained normal vision, but after reading for a while, my eyes feel strained. Would you still consider I had normal sight?

A—If your eyes feel strained you are not reading with normal vision.

Q—Seeing stationary objects moving appears to me to be merely self-hypnotism. I can't do it.

A—When riding in a train the stationary telephone poles appear to move in the opposite direction. Of course this is an illusion, but it is a benefit to the eyes to imagine all stationary objects moving.

Q—Is it possible to cure squint in a child under two years of age by the Bates Method, and what is the treatment employed?

A—A child, two years of age or younger, can be treated and cured of squint, with or without imperfect sight, by the Bates Method. The treatment is varied. The swing can be practiced by the mother holding the child in her arms. If the child is able to stand or walk, it is held by the hands and the sway is practiced with the child moving from side to side. Keeping time with music encourages the child to continue the swaying for a longer time.

Improving the memory and imagination of the child is also recommended. The child is encouraged to play with toy animals and is taught the names of the different animals. Usually the animals are placed on the floor in groups and the child is asked to pick up the animals as they are named. As the child reaches for one and then another, the parent may observe whether the child goes directly toward the toy or reaches to either side of it. This method is used in extreme cases of squint where the child does not see perfectly where is looking.

Colored yarns are also used in these cases. The child is taught the names of different colors. An improvement is always noted after such treatment, because the child is constantly shifting his glance from one colored skein of yarn to the other as he selects the one called for. The problem is to educate the eyesight. The more the eyes are used the better.

Palming is beneficial in the cure of squint. If the child is told that it is just a game of peek-a-boo, he immediately becomes interested and enjoys it. Reading a story to the child as he palms is usually beneficial, and improves the squint.

With children three years or older, the pot hook card is used. This is a test card with the letter "E" pointing in various directions. The child tells whether it is pointing up or down, left or right. If a mistake is made, palming is introduced in order to rest the eyes.

Children with squint are usually unruly, disobedient or destructive. When the squint is improved, a change in their conduct is also noted. They become quiet, obedient, and their mental efficiency is improved.

See left and right brain hemisphere activation, integration, balance and other new methods for curing squint.

### **Blinking.**

THE normal eye when it has normal sight rests very frequently by closing the eyes for longer or shorter periods, and when practiced quickly it is called BLINKING. When the normal eye has normal sight and refrains from blinking for some seconds or part of a minute, the vision always becomes imperfect. You can demonstrate that normal vision at the near point or at the distance is impossible without frequent blinking. Most people blink so easily and for such a short period of time that things are seen continuously while the blinking is done unconsciously. In some cases one may blink five times or more in one second. The frequency of blinking depends on a number of factors.

The normal eye blinks more frequently or more continuously under adverse conditions as when the illumination is diminished, the distance is increased or the print read is too pale or otherwise imperfect. The distraction of conversation, noise, reflections of light, objects so arranged as to be difficult to see, all increase

the frequency of blinking of the normal eye with normal sight. If the frequency of blinking is diminished under adverse conditions or from any cause the vision soon becomes imperfect.

The imperfect eye or the eye with imperfect sight blinks less frequently than the normal eye. Staring stops the blinking. The universal optical swing, the long or short swing when modified or stopped are always accompanied by less frequent blinking.

Blink in the early morning,  
Blink when the sun sets at night;  
Blink when the sun is dawning,  
But be sure you do it right.

### **Blindness. By W. H. BATES, M.D..**

A GREAT many people are blind or have vision so imperfect that they are unable to find their way about a strange place with the aid of their eyes. They are usually an object of interest to their friends and are frequently recommended to try every new form of treatment which comes out that promises any relief. They are too often disappointed.

The orthodox ophthalmologist has been guided by a certain number of rules. For example: a patient who has no perception of light is at once considered incurable, no matter what may be the condition of the eyes. The first shock that I experienced in such cases was in that of a girl who had total blindness in one eye only, the other being fairly good. She had been to many physicians, and all pronounced her incurable because she had no perception of light in the blind eye. This was a long time ago, and at that time I did not know as much as I do now and told the patient that nothing could be done to improve the blind eye. The eye itself appeared normal. There was no opacity and no organic disease which I was able to find. She told me that one doctor said she was born with something wrong with the eye center in the brain, which accounted for the blindness in the one eye. However, I treated her, planning to improve the slight, imperfect sight that she had in the good eye. Much to my surprise, the vision in the blind eye simultaneously began to get better. The first improvement the patient noticed was that she could see strong light off to the outer side of the eye, while her vision straight ahead and to her left was still dark. One of the most remarkable things about the case was the rapidity with which the blind eye obtained perception of light when the vision improved for objects and letters of the Snellen Test Card. After two weeks of daily treatment the vision of the right eye had improved to 10/200, and at the end of another week she had 20/20. From the results of treatment and other reasons I believe that this was just a case of blindness from squint without the squint, which is called in the text books amblyopia ex anopsia. After doing her so much good, I expected that she would return or at least send word how she was getting along. She was not heard from again. I believe, if there had been any relapse, she might have returned. Sometimes these cases do relapse, and I learn the facts from friends of the patient.

About five years ago a patient was led into my office, blind from retinitis pigmentosa. The vision of the right eye was perception of light, while that of the left eye was 5/200. The pupils of both eyes were small, and in order to examine the interior of her eyes her pupils were dilated with a weak solution of atropine. It was followed very quickly by an attack of acute glaucoma. This subsided after about two weeks. The vision of the better eye was lowered to perception of light while that of the right eye, which had been practically blind for many years, had improved to 10/200. This was a great surprise because it was so unexpected. After many months of daily treatment she obtained normal vision in the right eye and almost normal vision in the left eye. She stopped treatment against my advice. The case was published in the New York Medical Journal, February 3, 1917. Glaucoma is a very treacherous disease. One may have an attack and recover promptly under treatment. The same patient may have a number of attacks of temporary blindness, but sooner or later the patient will suffer an attack of glaucoma with total blindness, from which no recovery follows spontaneously. The patient goes to some competent ophthalmologist, who at once tells him that there is no hope of anything being done. At one time I examined with a microscope six eyes which had been enucleated for the relief of great pain from absolute glaucoma. Not one of these eyes was imperfect in any way. Quite frequently I have seen cases of absolute glaucoma which came to me for treatment, and which were completely relieved by palming and obtained normal vision in a very few days or weeks, some in even a shorter time. One such case, about ten years ago, had pain so severe that he was unable to attend to his business, and had been strongly advised to have the eye removed. He came to me as his last resort. After a half hour of palming the pain disappeared, and has not

returned since in all this time. I saw the patient a few days ago and he is still full of gratitude for the benefit he received.

If my method never did anything more than to relieve the tension and pain of glaucoma, I would feel that I had done something worth while. Whenever I think of those glaucoma cases I relieved, it is a very difficult matter for me to refrain from boasting. There are many eye doctors of my acquaintance who do not believe that palming does much for glaucoma, although I have gone to a great deal of trouble to advertise the fact. So strongly impressed on the minds of ophthalmologists that absolute glaucoma is incurable, that I can understand how difficult it is for men of experience to imagine that any of these cases can be benefited. Some day, soon I hope, some doctor will try the palming on a hopeless case and be gratified to find that these cases can be helped. If he has the courage to publish the facts he will find that his brother practitioners will not be as severe with him as he might expect. Some eye specialists have privately observed my work; and, although they at the time admitted that I was right and everybody else was wrong, they hesitated to indorse any of my discoveries publicly.

Many patients have said to me: "You cured me after other doctors failed. When I went back to some of them and reported the facts, they had nothing to say. What is the matter with them?"

Recently I was asked if my methods were of any benefit to the blindness of babies who have lost their sight from an infection soon after birth. I believe that these cases can be prevented by the well-known simple treatment as most doctors agree, but after the disease has caused blindness very few or no doctors believe that much can be done to restore the sight.

Some years ago I treated a girl, aged fourteen, whose right eye was blind following a severe inflammation of her eyes soon after birth. She was unable to see moving objects with this blind eye, but had perception of light. I had her hold the Snellen Test Card in her hand, close to her face, and to move it from side to side for a half hour or longer. In the beginning she could not imagine that the card was moving, but by appealing to her common sense she admitted that she did move the card, and furthermore that although she could not see it move, she could imagine it. The next day she practiced in the same way, and told me that she could imagine some black specks on this moving card and that the card was beginning to look more or less white. In a week's time she was able, as a result of daily use of the card, to see about half the letters with the card held close to her eyes. In another week she read the whole card. Then the card was placed gradually further off, and at the end of about three months the opacity on the front part of her eye had almost entirely disappeared and her vision had improved to 20/20.

I wish to emphasize that many cases of so-called incurable blindness can be completely relieved. It is wrong for any doctor or group of doctors who cannot cure cataract, for example, without an operation, to insist that because they cannot cure it nobody else can.

### **Stories from the Clinic. 52: A Blind Boy.**

**By EMILY C. LIERMAN.**

NOT long ago he came to us. Only twelve years old, but blind. His name is Lewis and he is of Jewish birth. If Lewis had been born blind he would not have had so many plans about the future, nor would he have been so sad.

During the month of March, 1923, he was operated upon for mastoiditis. Dr. Bates found with the ophthalmoscope that the boy had atrophy of the optic nerve of both eyes. From the history of the case he believed that the cause of the trouble was probably associated with an abscess of the brain, from the disease of the left ear.

After the operation for the relief of the brain abscess, a cerebral hernia appeared above and behind the left auditory canal. The hernia was about two inches long by one inch wide and projected outside the skull a distance of about one inch. For several months before the boy was seen by us the size of the cerebral hernia, we were told by the mother, had not changed. Before the operation or before the mastoid trouble he was a perfectly normal, healthy boy, full of life and hope. I shouldn't wonder but what he might have been planning to be a bank president or a radio expert, from the discussion we had together, after we became acquainted.

The morning of his first visit to us a telephone message came. A teacher from the school for the blind wished Dr. Bates would see him. The appointment was made and inside of one hour the boy arrived with his mother. Her eyes were staring at the doctor's face as he examined Lewis' eyes, straining every nerve of her body, fearing the verdict might be, "No more hope." After the examination, Dr. Bates came to my office and told me about the case and asked: "Wouldn't you like to see him? I think you could help him to see again." Oh! wonderful faith. It is the faith Dr. Bates has in me that keeps me going. His encouragement has helped me to benefit cases that

would otherwise have seemed hopeless to me.

When I entered the room where Lewis was, I saw a very forlorn looking boy sitting all huddled up in his chair, staring out of sightless eyes. His mother talked a blue streak to me, which was something like this:

"Oi, mine boy that he should be blind. Bles do you dink he can vunce more see? Vun year he vus blind, can see nuttink. Before dat he vus beeg and helty."

Of course the mother heart was crying out loud for help, and it was pitiable to hear her. I tried to explain that we would do everything possible for her boy, but I could not get a word in edgeways. I just closed my eyes for a few moments and prayed for help. I then spoke to Lewis as though he could see me and placed a test card in his hands, advising him to keep his eyes closed and relax in his chair as much as possible while he was doing this. I told him it was very necessary not to worry or to think of his blindness. He could think of a sunset, he said, also a white cloud in a blue sky. With just a few minutes of this treatment he opened his eyes and saw that the card was white. I had him close his eyes again very quickly and asked him to remember the whiteness of drifted snow. He said he could remember or imagine he saw the snow, but he could imagine a white cloud much whiter. I said all right, keep remembering the white cloud, but imagine it is moving. He said he could do that easily. After a half hour or more, Lewis opened his eyes and flashed a big black spot on the top of the card. I said: "If you will move the card slightly from side to side you will become able to see what that black spot is on the top of the card." Another half hour had passed by, both of us doing our very best, when all of a sudden my patient said, "It is a letter C!"

Then the mother screamed: "Ach Gott, mine boy sees." She threw her hands in the air murmuring all the while that her poor boy could see. Then she became hysterical and disturbed all the patients in the treatment rooms. I placed my arm gently around her and led her into my office, and then we both cried. My heart was with this poor mother, but my thoughts were of the boy, too. We had left him all alone and I was worried. I told her to offer a little prayer of thanks to Him who had heard my plea. I said, "Your God is my God, too, so ask Him to help us." I left her to see what Lewis was doing and I found him faithfully palming his eyes.

Although weary and tired after I had worked with Lewis over two hours, I was repaid a thousandfold when he read every letter of the 70 line and 50 line as he moved the test card slowly from side to side, close to his eyes, blinking all the time. He was instructed to stand and swing his body from side to side to lessen the tension of his body; also to blink his eyes all the time to stop staring; then to practice with the test card, many times a day, moving it slowly from side to side as he flashed the letters of each line on the card.

On his second visit he read the smallest letters on the card, the 10 line, but to do this he had to hold the card so close that it touched his nose. On his third visit he read the bottom line, holding the card an inch or more away from his nose. The sun treatment always helps him and he is advised to stay in the sun as much as possible. The cerebral hernia which on his first visit was very much inflamed or red in appearance, had lost most of its redness, and the size of the hernia was less.

On his last visit I placed him in front of a large mirror, and he saw it plainly. He could also see me standing behind him as he looked into the mirror. The sad look in his eyes is no longer there. Lewis informed me that a friend had given him a radio set, which he enjoys when he is not practicing with the test card. His smile is wonderful to see and his mother is more than grateful because of the hope we have given her in restoring the sight of her boy.

### **Sinbad the Sailor. By GEORGE GUILD.**

WHY Sinbad? Of what benefit to the readers of this magazine or to people who desire a cure of imperfect sight without glasses can a reference to Sinbad be? In Arabian Nights tales he occupies a prominent place. In his many voyages he described many queer things which happened and which were very wonderful, although not always probable or true. Being a sailor, he used his eyes principally for distant vision. He had good eyesight, but after one of his numerous voyages he returned to his home in Bagdad and complained to his friends that his sight for distance had become poor, so poor that he was unable to recognize people ten feet away. An Egyptian astrologer sold him a pair of glasses for a price which made a big hole in his savings. For a time he was happy because his vision was decidedly improved by the glasses, but it was not long before his imperfect sight required stronger glasses, and the strength of his glasses was frequently increased. In a shipwreck he had difficulty in reaching the shore because the water clouded his glasses so that they became useless. Whenever it rained the glasses became too clouded to help him to see. In many emergencies, when he most needed his glasses, they failed him. When swimming he could not see any better than without his glasses. It embarrassed him very much when trying to reach land, because he was unable to locate it. Other sailors would throw water in his face, fog his glasses, and tease the blind man without risk to themselves. With his glasses he suffered great pain and fatigue.

While visiting a city in a foreign land and walking the streets without seeing much, a stranger handed him a parchment on which was written:

"Go where all things are moving.  
Watch and think the livelong day;  
The truth is always proving  
Your sight will return, I say."

The words gave him some hope and he believed that in one of his voyages he would find some land or country where all things would be moving and nothing immovable or stationary. In a voyage to India he felt that in this country he would find a land where all things were moving. After a long day of traveling he entered a temple where many worshippers on their knees were alternately raising their arms and faces on high and then bowing to the ground, saying;

"Allah is Allah,  
God is Allah."

To avoid attracting attention he imitated the others while remembering that the paper of instructions told him to watch and think. He noted that when he raised his head up that things in front of him and to one side seemed to move down or in the opposite direction, and that when he bowed his head down to the ground, things appeared to move up. At last he believed that he had found a place where all things were moving. By going through the motions without the prayer he found that it worked just the same. After he left the temple he was able to notice that when he walked straight ahead things to each side of him, the ground in front of him, appeared to move in the opposite direction. He was able to demonstrate then, without any effort, that the place where all things are moving was wherever he happened to be, and since he was always moving his eyes during the day it was possible for him to see things moving opposite all day long.

(Shifting, The Swing, Oppositional Movement)

Watch and think was ever in his mind. He became able to demonstrate that when he imagined the movement easily that all pain, discomfort or fatigue in his eyes and in other parts of his body were prevented or relieved. It was not long before he found that the light became brighter; and, with this increased illumination, his vision improved.

When the swing was practiced with an effort, very little or no benefit followed. He discovered that the swing was a great help to his vision when practiced at night, and brought him more comfort than the same time devoted to sleep. All this time he believed that he had discovered a truth; that the cause of his imperfect sight was a strain or an effort to see, and that he was cured by rest and not by effort.

He returned to Bagdad overflowing with the wonderful news. He called on the Egyptian astrologer who had sold him his glasses, and with a happy smile on his face reported the facts.

The astrologer was furious and screamed in a loud voice:

"Out upon you, you lying knave. I believed your story of the mammoth bird, the roc, your experiences with mermaids and many others of your queer tales, but this is too much. To be cured of poor sight by rest is too absurd. You must be crazy." Then he drove Sinbad from his house, announced to the mob of people outside to shun him for a liar, a cheat, and a fool.

For many years later Sinbad held his peace, but did not neglect to help the blind until their number became sufficiently great to overwhelm the ignorant astrologer and others like him.

### **The Black Fairies. By MARGARET EDWARDS—AGED 8.**

Miss Margaret Edwards is a young subscriber of London, England. She was very much impressed by Dr. Bates' story, "The Black Fairy." Her story will suggest to mothers and teachers an interesting and successful way of improving the memory, physical and mental efficiency of children.

ON the top of a grassy hill the fairies live. All kinds of fairies—flower fairies, butterfly fairies, yellow fairies, green fairies, blue fairies, red fairies, orange fairies and black fairies.

Black fairies, you will say at once? Yes, black fairies; and the black fairies are very small, but very useful.

Perhaps you would like me to tell you what their work is.

Well, early in the morning they creep to the village, and hide in the bushes, waiting for the school boys to come.

Sometimes they see things that make the tears come into their eyes—they see little boys who wear spectacles knocked about by the bigger boys. Then the black fairies come back at night, when the small boys have gone to bed. They creep in at the window, and whisper to the boys in their dreams. The black fairies ask them what they want best, and they say, "To have perfect eyesight." So the black fairies say, "Always remember us, and see us before you in everything."

Then the black fairies disappear, and you can imagine the boys' delight when they wake up in the morning and remember the black fairies, and find they can see perfectly well without their spectacles.

### **Help Others. By EMILY A. MEDER.**

WHEN we help others we help ourselves. A teacher of arithmetic learns more than any of the class. This principle so well known is valuable for persons with imperfect sight.

Some eye patients have told me that they did not obtain any permanent benefit until after they tried to improve the sight of others.

In each issue of this magazine there is a report of the meetings held every month by the Better Eyesight League. These reports are merely a boiled down synopsis of the most important topics discussed. It is impossible to tell in detail the pleasure that is derived from this hour's talk, the intense interest displayed, and the many valuable suggestions made.

The League is now two years old and is a "grandmother." There is a League in East Orange, one on its way in the Middle West and in England. We hope to have Leagues in all the large cities before long.

The League was started by a group of Dr. Bates' patients who were cured or benefited and by some interested book readers. The object was to help prevent imperfect sight in school children and others and to meet each month to discuss these cases. Dr. Bates consented to the plan and offered to attend every meeting in order to help the members with puzzling cases.

The membership has steadily grown, and the idea spread, with the results stated above. The original ten or twelve members have increased until there is sometimes "standing room only" in the Central Fixation Publishing office, where the League meets.

A member is one who is desirous of helping others cure their eyes and will give as much help to their friends and acquaintances as they can. It is not essential to attend the meetings. If you know the fundamental principles and can demonstrate them to your own satisfaction and benefit, you are equipped to help your friends discard their glasses.

People are willing to learn, but they are held fast by the old superstition that weak eyes need glasses. They understand that glasses do not cure, but they are afraid of going blind if they do not wear them. These people need help. Tell them the truth about their eyes.

Now that summer is on the way and the sun is becoming stronger every day, people will begin to wear colored glasses. This is very harmful. The sun is man's best friend and especially beneficial if allowed to focus on the eyes. Advise against sun glasses and explain that it is helpful if the rays shine on the closed lids. This will do away with the temporary discomfort and will accustom the eyes to the bright clear light.

One prevalent cause of defective vision is staring. This is usually unconscious, but none the less dangerous. We call your attention to this fact because it is the first thing to correct when helping your friends.

### **Kindergarten Children Benefited. By EMILY C. LIERMAN.**

A KINDERGARTEN teacher who attended one of our recent lectures requested me to help one of her little charges who is afflicted with squint. She informed me that the little one is very poor, so I advised her to bring her to my clinic.

To become more acquainted with me, and the way the cases are managed there, this teacher, at my cordial invitation, visited the clinic.

I would like to tell more about the teacher and what she has accomplished with her slight knowledge of our method.

She has a sunny disposition, and I can well imagine a good mental picture of the children as they greet her every day in the classroom. She loves her little pupils, and is also a great lover of nature. It is her happiness to bring the two together in her work.

She explains to her class, in her lovable, sweet way, just how the flowers grow, and makes them understand what happens before the first shoots peep their noses above the ground.

This teacher's name is Cecilia B. Eschbach and the kindergarten is connected with the Brooklyn Orphan Asylum. A short time ago I received the following letter from her which I thought would interest our readers.

"Dear Mrs. Lierman:

"In spite of North Wind's biting breath, the little children of the kindergarten know Spring is here. Their gardens give evidence of it, for the crocuses are up, the daffodils have twelve fat buds; the hyacinths and tulips, too, have grown to quite a size. To create a situation for conversation about awakening Spring I placed eight empty flower pots in a paper bag. The one who opened the bag was called the gardener. He chose eight children, and gave them each the name of a flower, to go with the pots.

"Every child was familiar with the following flowers and could name and identify the real ones: crocus, tulip, dandelion, daffodil, hyacinth, Easter lily, pink sweet peas, rose. The little gardener decided to give away his flowers, but could not remember the name of the eighth one. I said, 'Palm your eyes, William.' He did so, and in a moment said, 'Pink sweet peas.'

"The children have learned to palm their eyes with good results. Two who have a cast in their eyes play the swinging game and keep looking at the ceiling.

"Sometimes we sing it, or sway to the rhythm of the piano. They are improving.

"Hoping this report will be of interest to you and thanking you for your kindness, I am

"Very truly yours,

"Cecilia B. Eschbach."

### **An Instructive Reprint.**

An article by C. S. Price, M.B.E., F.R.G.S., recently appeared in "The Herald of the Star," an English Magazine, dealing with Dr. Bates' method. The writer, a layman, handled the subject in a clear, intelligent way, easily grasped by the reader. The fundamental principles of the method are explained, together with a review of the following:

We recommend this for its ability to treat the entire method in a concise, helpful way,  
Reprints of this article for sale.  
Price 30c.

### **At the Movies. By MRS. A. L. REED.**

Mrs. Reed is studying this method, and is practicing at the East Orange clinic. The following report will be helpful to those who experience discomfort at the movies.

Glasses and strain at the movies produced imperfect sight and headache; the removal of the glasses and using the eyes without strain relieved the headache and improved the vision more than with the glasses.

MY patient had not been to the clinic in several weeks and when she entered with a twinkle in her eye I knew something was coming. After a few minutes' work she explained, "I've got to admit you are right. The last time I came you told me something that made me think you were wrong. You said the movies were good for the eyes if we looked at them right. Last week I went to the movies and in a short time I had a headache. Then I thought of what you had told me and decided to try it. First I took my glasses off and tried to relax all over, then I stopped trying to hold the pictures still, and just let them go. I looked at one thing at a time and didn't worry about the rest. After a few minutes I realized that my headache was gone, and my next surprise was when it dawned on me that I was seeing the picture clearer than I had ever seen it with my glasses on. I didn't miss much of the show either after I stopped trying to see it all at once, and straining after every little detail.

When I came out of the theatre I said to my husband, "I guess I was wrong instead of Mrs. Reed and I'll go back to the clinic and get some more help."

I told her that she certainly had profited by the show, thanks to Dr. Bates' method.

### **Questions and Answers.**

Q—Should a person who has discomfort in the sunlight, persist in going without a hat?

A—Yes.

Q—What do you suggest for an eight months old cross eyed baby?

A—Swinging with the help of the cradle and the loving arms of its mother.

Q—If closing and resting the eyes is beneficial why won't sleep cure defective vision.

A—Sleep is hard on the eyes because most people strain their eyes more when they are asleep than when they are awake.

Q—My eyes grow so tired when I read, that I usually fall asleep over my paper. Can this be helped?

A—Sleepiness is caused by strain. Strain is caused by imperfect sight. When you read with perfect sight you will not become sleepy.

Q—What is the best exercise for school children with myopia?

A—Reading the Snellen Test Card and palming.

## Questions.

ASKING questions is all too common with patients who have imperfect sight. There are important or necessary questions which the patient should know in order to bring about a cure. The cause of the imperfect sight should be emphasized. In all cases of imperfect sight a strain, an effort, a stare or concentration can be demonstrated. To see imperfectly requires a great deal of trouble. Even the imperfect memory or the memory or imagination of an imperfect letter is an effort. It is so great a strain that the memory or imagination fail if you keep it in mind for any length of time. Perfect sight can only be obtained without an effort, without a strain. It is impossible to remember or imagine things perfectly by an effort.

One may divide questions into (1)—Proper questions; (2)—Improper or useless questions.

It is a waste of time, an injury to the patient, for him to describe the infinite manifestations of imperfect sight.

To know its history minutely and its variations require an effort on the part of the patient to describe these things. And this effort increases the imperfect sight. It is absolutely of no help whatever in formulating methods for its cure. Avoid asking questions about the symptoms of imperfect sight or anything connected with imperfect sight. Any question connected with perfect sight may be a good thing for the patient to know. One may ask questions as follows:

How long must one practice a perfect memory, a perfect imagination or study the latest manifestation of perfect sight?

The answer to this question is a benefit to the patient.

## The Optical Swing. By W. H. BATES, M. D..

MOST people when they look at stationary objects believe that they see such objects stationary; but if they observe the facts more closely, they find that when the normal eye regards a small letter of the Snellen Test Card with normal sight, the letter does not appear to be stationary, but seems to move from side to side, a distance about the width of the letter. This is called the optical swing.

This is caused by the movement, shift of the eyes from point to point (part to part) on the letter.

During the late war, a soldier, who was rated as a sharpshooter, told me that when he regarded the bull's eye of a target five hundred yards away or further, that he had difficulty in aiming his gun properly because the bull's eye seemed to move from side to side a very short distance. Both he and others who had observed it did not discuss the matter with any great interest.

The movement of a letter or other object from side to side in the optical swing is so short, so slow, that most persons with normal eyes have never noticed it. There is no reference to the optical swing in any publication which I have seen. It is a truth that in all cases of normal sight the optical swing can be demonstrated. In all cases of imperfect sight the optical swing is modified; it may be lengthened, it may become too rapid and irregular. The swing is a necessary part of perfect sight. The importance of it has not been realized. With the short optical swing the vision is good while the mental efficiency and the efficiency of the nerves and muscles is enormously increased.

**THE SHORT SWING:** When the swing is short, no more than the width of the letter, the vision is normal; when the vision is normal, the swing is short. One cannot have normal vision of a letter, a normal memory or a

normal imagination, without demonstrating the presence of a short optical swing.

It can be demonstrated that it is impossible to remember or imagine with the eyes closed a letter, a color or any object without the optical swing. When the swing is stopped an effort or strain is necessary, which may be conscious or unconscious, and the memory or imagination becomes imperfect. Normal vision is not maintained continuously without the short optical swing. It is not necessary, however, for one to be conscious of the swing in order to demonstrate normal vision.

(Practicing seeing it improves the clarity of vision.)

Methods of treatment which restore the optical swing are a benefit to imperfect sight. When the short swing can be demonstrated, the vision, the memory and the imagination are normal. One cannot imagine the short swing and imperfect sight at the same time. One cannot remember or imagine pain, fatigue or any symptom of disease and the short swing at the same time. For example, the symptoms of acute indigestion have disappeared when the patient imagined the short swing of a letter or some other object. In some cases, hay fever symptoms have disappeared quickly and permanently, through the use of the short swing. Bronchial troubles, the cough associated with influenza and whooping cough, have disappeared quickly when the short swing was imagined quickly.

**THE UNIVERSAL SWING:** When you hold the Snellen Test Card in your hand, you can imagine a small letter "o" printed on the card to have a slow, short, easy, continuous, regular swing. Of course, when the "o" swings, the card to which it is fastened also swings; when the hand holding the card swings, the card swings and the letter "o" swings. When the letter "o" swings the card swings, the hand swings, the wrist, the forearm, the elbow, are all swinging with the "o". If the elbow rests on the arm of the chair, when the chair moves the elbow moves; when the elbow moves, the card moves. One can demonstrate that a letter "o" pasted on the Brooklyn Bridge moves when the bridge moves, and when the "o" moves the bridge moves. One may think of many objects, one at a time, each one in turn moving with the moving "o". This is called the universal swing. This movement is caused by the movement, shift of the eyes. Moving the head/face, body with the eyes improves appearance of the movement.

The universal swing has been a wonderful benefit in improving many cases of imperfect sight, in the relief of pain, fatigue and other symptoms of disease. It can be demonstrated that when one has the universal swing the sight is perfect. If the universal swing becomes modified, the sight is imperfect. There are no exceptions. This fact has suggested successful treatment for myopia, cataract, and other causes of imperfect sight.

It is well to remember that some people have difficulty in imagining the universal swing. They are very apt to separate the letter "o" from the card and imagine that either the card or the letter moves; and it is difficult for them to imagine the letter and the card fastened together and one unable to move without the other moving. Of course one can imagine the hand moving and the arm stationary, but when the hand and the arm are in a vise or fastened very closely together without any hinges, it is difficult or impossible to imagine the hand is moving without the arm moving as well. Persons who have difficulty in imagining the universal swing should consult others who can demonstrate it, explain it and help them to accomplish it.

The entire visual field moves 'swings' in the opposite direction the eyes move, shift to.

I generally suggest to my patients that they practice the universal swing twice daily, morning and night; or better still, practice it at all times, in all places, no matter where they are or what they may be doing.

**THE MEMORY SWING:** With the eyes closed you can feel your eyes move under your fingers when lightly touching the eyelids. If you imagine that you are looking over your right shoulder, you can feel the eyeballs move to the right, and a long distance to the right. When you imagine that you are looking over your left shoulder, you can feel your eyeballs moving to the left, and far to the left. One can shorten the movement of the eyeballs by looking a shorter distance to the right, alternately looking to the left. With a little practice one can feel or imagine one feels, the eyeballs are moving the shortest possible distance from side to side. The eyeballs can be seen to move under the closed eyelids. The memory swing is a good thing to practice under conditions which would not be so convenient for the other kinds of swings. One can practice the memory swing in a dark room, on a dark night, in a dark cellar, in bed, and obtain a mental relaxation or an optical relaxation or a relaxation of the nerves which is worth while.

Imagine shifting left and right, top and bottom on a tiny fine print letter and feel the eyes move.

Imagine seeing the swing; the letter appears to move in the opposite direction the eyes shift to. Produces very clear vision.

**THE VARIABLE SWING:** Some years ago a school teacher called for treatment. She had a conical cornea, which is a very serious disease of the front part of the eye. The cornea bulges and becomes conical. The apex of the cornea becomes ulcerated, and may become perforated with loss of aqueous. Various operations have been

recommended, but the results have been usually very unsatisfactory. The vision of the patient was 1/20 of the normal. She was very much benefited by the variable swing. The variable swing is shorter at twenty feet, or further than it is at six inches. In this swing the patient holds the forefinger of one hand to one side of the temple, and while looking at the Snellen Test Card, the head is moved from side to side a short distance. The patient when looking straight at the card, was able to imagine the finger moving from side to side an inch or more, while the test card moved a much shorter distance, or did not appear to move at all. By shortening the movement of the head, the swing became still shorter, until the finger seemed to move no more than its own width, and the card seemed stationary. It was very remarkable how her vision improved with the improvement in the swing. At the end of about an hour of the variable swing, her vision had improved to 1/2 with flashes of normal sight occasionally, which was a great deal better than the vision she obtained with her glasses. There are some people who can practice the variable swing and obtain good results, while there are others who are not able to use it with any help or comfort. It is difficult for me to explain why or how, some people obtain good results from this form of a swing, while others require supervision with a great deal of mental gymnastics from their medical adviser.

**THE LONG SWING:** The patient stands with the feet about twelve inches apart, facing one wall of the room. He is directed to turn his body and his shoulders to the right, and in order to do this he lifts the left heel a few inches from the floor. The head is not turned on the shoulders, and the eyes are not moved in the head. The whole movement is brought about by turning the body until the shoulders are square with the right hand wall. Then the body is turned to the left, and to promote this movement the right heel is lifted a few inches from the floor. The body is turned until the shoulders are square with the left wall. It is very important that moving objects are not observed closely: do not try to see clearly objects which are moving.

This is the long swing, and it can be done with great benefit, because it relieves symptoms of pain when other methods do not succeed. When the patient is suffering from a severe pain, it is not easy or always possible to imagine the short swing. The long swing is the only one available under these conditions. The long swing is always a relief to some extent; and furthermore, it enables the patient very soon to obtain the short swing, which gives even greater relief from pain than the long swing. Besides relieving pain, the long swing benefits or relieves fatigue.

It is a matter of great interest, that the long swing relieves pain, without necessarily correcting the cause of the pain. Pain from an injury or from a foreign body, can be relieved by the long swing. The long swing does not usually give complete relief of pain, but it paves the way to the practice of the short swing, which is a greater relief.

The long swing is also a benefit to imperfect sight. The central vision is improved, and what is also unusual, the long swing improves the field of vision. It improves night blindness, it improves day blindness. The long swing has improved opacities of the cornea so dense, that vision was reduced to perception of light. Yet, although the opacity of the cornea was so dense in some cases, that the pupil could not be seen, it would clear and the vision become normal after some weeks or months. The long swing also helps glaucoma, cataract, diseases of the optic nerve, diseases of the choroid, detachment of the retina.

One needs a sufficient amount of light in order to practice the long swing.

**THE DRIFTING SWING:** One day there came to the office a patient, who was among the worst that I have ever seen. In the first place, the pain that he had in his head, his eyes, his shoulders, his back, and pretty much in all parts of his body, was the most severe that any of my patients has ever described. It was so severe that I have often suspected that he used a dope of some kind. Beside the pain, he complained of great depression. To hear him talk, he gave you the impression of being very miserable; and for some reason or other, he could describe the condition of general misery more vividly than I have ever had the pleasure (?) of hearing it described before. His misery was mitigated to some extent, he said, when he took long walks with one or more friends, and became interested in their conversation.

(Patient difficult to treat, cured)

This case was remarkable for several reasons. With all my knowledge of various methods of resting the eyes, he failed to obtain the slightest benefit from them. In fact he said that when he tried the treatment, the pain, the depression, and his general misery, were increased alarmingly, and instead of being a rest, it was actually an injury. He did not see a dark shade of black when he closed his eyes, but rather various colors—red, blue, etc. I tried to have him practice the swing, and I exhausted my knowledge of the various kinds of swings, but was unable to have him practice successfully any swing that was of the slightest benefit; in fact, the more he tried to follow my suggestions, the worse he felt. Again I tried him with memory, encouraging him to tell me of the experiences he had had in Europe, in New York, and in his home town. He had absolutely no mental pictures, and although I had usually been able to teach people how to imagine mental pictures, in this case I failed

ignominiously.

I tried many things that I knew and after I had exhausted the things that I had already practiced, I realized that I was up against it, and had to devise and have him practice with benefit, something that I had never recommended before. As he could not think of anything continuously without discomfort, I suggested that he let his mind drift. As he had a very active mind and was continually thinking of a great many things, I suggested that he make no effort to keep his attention fixed on any one thing, but let his eyes keep shifting from one object to another. I asked him not to strain his eyesight to see the things about the room at all clearly, but rather to remember or specialize or think about objects in some other room. For example, when he looked at a chair in the waiting room, I asked him to remember some other chair or other object that he had seen in some other room.

It is not easy to describe what I mean by the drifting swing. Of course when he looked from right to left, the objects seen moved from left to right; when he looked up the objects moved down, and the whole time that he spent in shifting his eyes continuously to various parts of the room, some of the objects moved opposite to the direction of his shifting. His mental pictures, if he had any, were remembered with so little responsibility on his part, that he felt no discomfort. Part of the time he spent talking to some of the patients in the waiting room, and I encouraged him to take things easy, and to be as comfortable as he knew how.

In this I believe, he succeeded, because when I invited him to go into another room, where he could test his sight with the Snellen Test Card, he was smiling, a new experience for him. His vision for distance was normal, and the speed with which he read all the letters on the test card was gratifying. The rest had given him, at least temporarily, perfect sight for the distance, whereas before even with his glasses on his vision was less than one-half the normal. He was also unable to read diamond type with or without his glasses. After practicing the drifting swing he read the diamond type rapidly, perfectly and without any apparent effort, at less than twelve inches. Then he said to me,

"Doctor, do you think you can help me?"

I answered him, "Did you read the test card and the fine print perfectly?"

"Yes," he answered and blushed.

That was the first time I ever saw a man blush under such circumstances. The blush was to me an admission that he realized that I had given him a temporary cure.

He sends me patients from time to time, who report that his eyes seem to be cured without glasses.

All this happened some years ago, and I have been able in many other cases, to obtain good results with the drifting swing, when other treatment had failed.

**FAILURES:** There are some people who have great difficulty in demonstrating the illusion of stationary objects moving. Persons with imperfect sight do not ever imagine perfectly the optical swing. By practicing resting the eyes, testing the memory and imagination, they may after some weeks, months, or a longer period, become able to imagine a short, as well as a long swing. The failure to imagine that stationary objects are moving, is always due to a stare or strain. One can stare in looking straight ahead with the center of sight, and one can stare by trying to see with the sides of the retina, eccentric fixation.

The normal eye is only at rest when it is moving, and the optical swing can be demonstrated.

Modern improved, combined version of most of these swings is the Infinity Swing, Figure Eight. See pictures below and on last pages of this book.

### **Stories from the Clinic. 47: My Young Assistant. By EMILY C. LIERMAN.**

ONE evening while treating some patients in my home, Baby Ethel, aged three, who had been living with us for over two years, came into the room and sat in a big armchair observing the treatment and listening to every word that passed between the patients and myself. She has large blue eyes, and when she is excited or interested in anything her pupils dilate and the iris seems to change color.

When I told one of the patients to palm for ten minutes Ethel placed her hands over her eyes also. She kept perfectly still for about two minutes and then we heard a pitiful sigh. I watched and presently two little fingers of her right hand began to separate and she peeped. When she saw me smile she quickly removed her hands from her eyes and for a while she sat quietly. Presently she left the room to join other members of my family. After my patients had departed I discovered her in a room ordering the head of the household to palm. She was pointing with her little finger to an imaginary test card on the screen door. The head of the house certainly needs to do some palming and also to practice other things to improve his imperfect sight. Sometimes those whom we love are not easily persuaded to do the things that benefit them, but here was this little three-year-old very seriously giving him a treatment. Then she demanded: "Take down your hands and read the card. Do you see the R? Now close your eyes and 'member it," she demanded. He did so in all sincerity. "Now open your eyes

and read some more." He mentioned several letters and then she said: "Swing your body, side to side, and see letters swinging opposite."

He got up and swung as he was told, as all of us looked on in amazement, not daring to laugh, knowing that the little lady was very sensitive.

"Now," said she, "sit down and read some more letters."

He read very faithfully, following her little finger as she touched various parts of the screen door. All of a sudden she complained: "You are staring. You shouldn't stare; that is bad."

"Well," said he, "what must I do, then?"

"You must blink your eyes. Just let me show you how."

She stood before him, blinking and swinging her body from side to side, looking as serious as a judge. At this moment, to our sorrow, we all laughed. I myself could not hold back a moment longer. That broke the spell, and my little three-year-old assistant began to cry. But since then her efforts have not been in vain, for I notice that her patient still keeps up the treatment. I am grateful to Baby Ethel in that she was able to accomplish more for him than I could myself.

While we were sitting in our garden one day an aeroplane passed over our place, and as it traveled on he was able to see it miles away until it became so small to our view that it looked like a small black spot. He then closed his eyes for a while and afterward he read a newspaper for a half hour or so. It has been a long time since he was able to read for that length of time.

When our friends called on us Baby Ethel was ever ready to show them how to palm and swing. She directed her mother to palm if her head ached or if she suffered any pain. Ethel was sincere about it all, because, as she explained it, "Dr. Bates helps big people and little people that way in his office."

She knew Doctor very well and would talk to him about reading the test card to help children's eyes. She has perfect sight. Her eyes are never still and she blinks unconsciously all day long. If only adults would follow her example there would be less eye strain. I am very grateful for what she accomplished for my husband. Does not the Bible say: "And a little child shall lead them."

### **Some Clinic Cases. By DR. J. M. WATTERS.**

IN the two years we have been using Dr. Bates' eye system in our offices we have discovered that our most interesting and unusual cases are to be found in the free Clinic. When this Clinic was opened last October we expected a few scattered patients to take advantage of our offer of free treatment, but great was our surprise on the first evening to find our offices and even the corridors of the building filled with men, women and children of all descriptions, each one pathetically eager to take one more chance at saving his eyesight. The variety of cases was great, ranging from simple refractive errors to various forms of squint, cataract and glaucoma.

One very interesting case which we treated was that of a man thirty-one years old, who ten years previous had been hit in the right eye with a golf stick. He had been advised many times to have the eye removed surgically, as the eyeball was constantly inflamed. When we first examined him his vision was dim at 10/70, and his near point negative. When our Clinic closed for the summer his vision had improved to 10/15, the inflammation was no longer present, and his near point was positive.

Another interesting case was that of a young man with congenital cataracts of the zonular type in both eyes. The cataract in the right eye had apparently remained stationary, but the left had started to spread, which was his reason for coming to the Clinic. At that time the vision in the right eye was 10/30 and in the left 10/40. His near point was 12". After eight visits his vision was 10/10 in both eyes and his near point 6".

A man sixty-six years of age, suffering from glaucoma, came for treatment after being told by six different specialists that only an operation could help him. We examined him and found the distant point 10/30 in both eyes, his near point negative, and a tension of 40 mm. of mercury in both eyes. At the time the Clinic closed his vision was 10/15 in both eyes, near point positive, and tension reduced to 25 mm. of Hg.

Another case of glaucoma that was of special interest was that of a man sixty years old who showed the hemorrhagic type of this disease in the right eye, with total loss of vision and a tension of 40. There was also a complicating cataract. The vision in his left eye was 10/30 and the near point was negative. When he discontinued treatment at the Clinic his left eye was normal for both the distant and the near point. In the right eye the hemorrhagic condition had entirely disappeared, the tension was reduced to 23, and the cataract was beginning to disappear. I believe that eventually the right eye will clear up entirely. The astonishing feature of this case was that an operation had been advised as the only means of relief, and one physician had even suggested removing the eyeball.

We had a number of hyperopic, presbyopic and myopic patients, all of whom responded readily to treatment.

Among the myopic type we found several patients with a vision of only 10/200 in both eyes, and in a very short time they were able to read 10/15 and 10/10. Hyperopic and presbyopic patients who were unable to read diamond type when they first came in for treatment were soon able to read fine print as they could large headlines in a newspaper. Patients who complained of constant pain in their eyes, or of the inability to read or sew without discomfort, were greatly relieved and in many cases absolutely cured after a few visits.

We reopened our Clinic on the evening of November 6 at seven o'clock, in our offices at 2 Lombardy Street, Newark, New Jersey. The work will be continued throughout the winter and spring on Tuesday and Friday evenings. We trust that readers of Better Eyesight will take a personal interest in this Clinic and help to make it an even greater success than it was last year.

### **Report of the League Meeting. By MAY SECOR, Recording Secretary.**

THE November meeting of the Better Eyesight League was held on November 6th, at 383 Madison Avenue. Dr. Clinton E. Achorn, an osteopathic physician of this city, was the speaker of the evening. Dr. Achorn is a former pupil of Dr. Bates and has now been practicing the Bates' Method for some time.

The speaker presented a very encouraging report of the results he has obtained, correcting defective vision without the use of glasses. He emphasized the importance of the use of the memory and imagination in this work and reported a case in which the vision improved fifty per cent within twenty-four hours after the patient had secured adequate use of his memory and imagination. Perfect relaxation is also essential in the correction of visual defects. Sight is impaired by strain, and fatigue follows effort.

Many cases of defective vision in children may be cured as the result of one lesson; normal use of the imagination and memory, and the facility with which the child relaxes, are helpful elements in these cases. The absence of mental strain in a child is due largely to the fact that he usually forgets quickly; when his attention is called to a new object, the former object of his attention is forgotten, and so on throughout the day. The application of this principle in the correction of defective vision will prove helpful: one should see best the object or letter at which he is looking; and, proceeding to the next object or letter, he should forget the former object of his attention.

At the close of Dr. Achorn's interesting address, Dr. Bates discussed requested subjects. Dr. Bates explained the failure of hypnotism and faith in correcting defective vision as due to the presence of effort; effort precludes relaxation.

The next meeting will be held on Tuesday, January 8th, 1924, at 8 o'clock, 383 Madison Avenue.

### **Get a Good Start with Some New Resolutions.**

**By EMILY A. MEDER.**

SOMEONE remarked recently that "promises were made to be broken." I wonder if the same train of thought is carried out with New Year's resolutions. How many of us conscientiously adhere to them throughout the year. Yet, the fact that we have made them is in our favor, for from time to time during the year they spring to life and we renew them for another week, until forgotten again.

Resolutions, however, are made for one's own benefit—either financially, physically or spiritually. Begin now with the right attitude towards your eyes, and resolve that you will treat them decently. It is not necessary to pamper them; just give them half a chance and they will do the rest. Resolve that:

1. You will not overwork them by staring.
2. You will relieve them from duty by blinking constantly. Eyes are like sentinels; they are tense while on duty and must have systematic relief.
3. Palm frequently. This is relaxation to the eyes and is what play is to the soldier. One always works better for having a little play.
4. Swing and see objects moving. This is good exercise and keeps the eyes "in trim."
5. Read small print as much as possible. This requires relaxation. You cannot read fine print very well if you strain. Large print you can read under a strain.

Let these five rules govern your eye action. They aren't difficult, and become a good habit with practice. After all, your eyes will appreciate it, and perfect sight is worth "resolving" for.

### **A Glaucoma Case.**

**By DR. HAROLD J. GEIS.**

MRS. Z., the mother of four children and the wife of a very wealthy farmer, was referred to me by a local physician who apparently believed what I said when I told him I felt reasonably sure that I could benefit a glaucomatous case which he had been unsuccessful in treating for several weeks. He wanted the lady to undergo an operation (an iridectomy) but she refused, thanks to the Lord and Dr. Bates.

When she called on me she felt rather skeptical, but as she said afterwards, "I was willing to take a chance inasmuch as it did not necessitate an operation."

She was unable to recognize the big "C" at six feet. In fact she could not count the fingers on my right hand at five feet. When she tried to read the card I noted a slight tilting of the head, and I felt sure this was due to eccentric fixation. I explained to her that she made an effort to see every character on the card equally well, and that if she wanted to improve her vision and see perfectly she should see one letter best and all the other letters on the Snellen Test card worse. I then had her palm for ten minutes, after which she was able to read the 10/70 line. Then I told her to "flash," trying not to see the characters all equally well but just the one she was looking at should be seen best and all the other letters worse. She was enabled by this exercise to read the 10/40. Her husband, who was standing beside me while I was treating her, said: "Ann, how do you like it?" and she replied, "Dr. Geis has hypnotized me."

After eleven treatments she can read, write, sew, and to her most important of all, go to the movies. She thinks her cure is miraculous and so do her many friends, but as I tell them, "It's all in a day's work" and simple if one understands the fundamental principle, which is muscular relaxation, of the Bates Method correctly applied.

### **The Question Mark.**

#### **QUESTIONS AND ANSWERS.**

Q—When doing the swing, does one move the head or the eyes?

A—The eyes are always moved; moving the head also may help.

Q—Does massaging help the eyes?

A—No.

Q—What causes the eyes to become bloodshot? How is it cured?

A—The cause is strain. It is cured by relaxation.

Q—Is practicing under a strong electric light as beneficial as practicing in the sun?

A—It may be.

Q—Is closing the eyes and resting them during business hours as efficient as palming?

A—Usually not.

Q—Can one remember perfectly and see imperfectly?

A—No.

Q—What is the quickest cure for imperfect sight?

A—Imagine something perfectly. If you imagine the white Snellen Test Card perfectly white, you'll see the letters perfectly black. If you see them perfectly black, you can tell what they are.

Free Better Eyesight Magazine;

<http://www.clearsight.info/naturalvisionimprovementoriginalandmodernbatesmethod/>