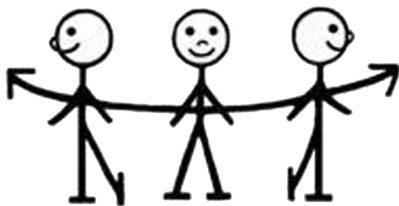




Variable Swing with finger to side of face. Move the head left and right and see the finger move opposite.



Variable Swing with finger in front, center of face, between the eyes, eye level.



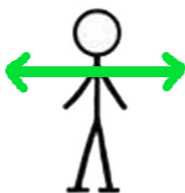
Long Swing

Swing the body left and right. Head/face, eyes, body move together, at the same time, in the same direction.

See oppositional movement; objects in the visual field appear to move 'swing by' in the opposite direction.

Do not stop to look at the objects. Keep swinging, relax and let them move.

Treatment for conical cornea and unclear vision.



When looking at, shifting on the letters on the distant eye chart the chair and chart appear to move 'swing', in the opposite direction the eyes move to. The chair shows the most movement, more than the distant chart.

Practice relaxation and shorter shifting on small letters on the chart and see a shorter swing.

Rock the body left and right in front of the chair, chart and see the chair appear to move opposite the movement of the eyes/body and the chart appear to move with the eyes/body in the same direction.

THE VARIABLE SWING

RECENTLY I have been impressed very much by the value of the variable swing. By the variable swing is meant the ability to imagine a near object with a longer swing than one more distant. For example, a patient came to me with conical cornea, which is usually considered incurable. I placed a chair five feet away from her eyes, clearly on a line with the Snellen test card located 15 feet distant. When she looked at the Snellen test card and imagined the letters moving an inch or less she could imagine the chair that she was not looking at moving quite a distance. As is well known the shorter the swing the better the sight. Some persons with unusually good vision have a swing so short that they do not readily recognize it. This patient was able to imagine the chair moving an inch or less and the card on the wall moving a shorter distance. She became able to imagine the chair moving a quarter of an inch and the movement of the Snellen test card at 15 feet was so short that she could not notice it. In the beginning her vision with glasses was poor and without glasses was double, and even the larger letters on the Snellen test card were very much blurred. Now, when she imagined the chair moving a quarter of an inch and the Snellen test card moving so short a distance that she could not recognize it, the conical cornea disappeared from both eyes and her vision became normal. To me it was one of the most remarkable things I have seen in years. I know of no other treatment that has ever brought about so great a benefit in so bad a case.

The variable swing is something that most people can learn how to practise at their first visit. Some people can do it better than others. The improvement depends directly upon their skill in practising the variable swing.

BETTER EYESIGHT

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

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No. 5

M A R I A N

BY W. H. BATES, M.D.

THIS case is reported because the child on account of her enthusiasm obtained normal vision in a short time—about a week.

The patient was ten years and six months old. She was wearing glasses constantly, concave 2.25 D. S. combined with convex 4.00 D. C. 90 deg. in each eye. Even with her glasses her sight was imperfect for distance. At the near point she read diamond type at six inches the closest distance from her eyes while she could only see it two inches further off, at eight inches without her glasses. This inability to read over a greater distance was a hindrance to comfortable reading and her eyes tired. She was taught to rest her eyes by closing them and covering them with the palms of her hands (palming). With her eyes closed and covered she was told to think of other things than her eyesight, to remember things that were pleasant for her to remember, and she learned to do this so well that she told me that everything was dark, perfectly black all the time.

ASTIGMATISM

([& Cornea scars](#))

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

IN astigmatism the curvature of the eyeball in one principal meridian is greater than in the one at right angles to it. The eyeball is lop-sided. In such an eye, rays of light, are not focused. It differs from the near-sighted eye in which parallel rays of light are focused in front of the retina. In the far-sighted eye, Hypermetropia, parallel rays of light are focused behind the retina.

Occurrence: Astigmatism is very common and may be near-sighted astigmatism, far-sighted astigmatism or it may be combined with either near-sightedness or far-sightedness. Again the astigmatic eye may be far-sightedness in one principal meridian and near-sighted in the other. This is called mixed astigmatism. Regular astigmatism can be corrected by the use of proper glasses. Irregular astigmatism due to a malformation of the front part of the eyeball, the cornea, the lens or to the eyeball itself cannot be corrected by glasses.

In the normal eye astigmatism can always be produced by some kind of a strain. One kind of strain will produce one form of astigmatism while another form will produce a different form. We have an instrument which measures the curvature of the front part of the eye called the Ophthalmometer. With this instrument we can detect and usually measure astigmatism produced by some change in the shape of the cornea. We can observe with it the production of corneal astigmatism of varying degrees when the subject strains either unconsciously or consciously. The amount of astigmatism that can be produced by different individuals is variable. I have seen people who could consciously produce astigmatism of 3D. By practice one can acquire the ability to consciously produce astigmatism of the cornea at different axes. This fact may explain why glasses which correct astigmatism at one time do not correct it at another time.

Many cases of normal eyes have been observed which later acquired astigmatism. In many instances patients later returned wearing glasses for the correction of astigmatism and complained that the glasses no longer suited them and when the eyes were tested no astigmatism could be found. It can be demonstrated that astigmatism may be acquired and that it may spontaneously disappear. What has been said of astigmatism caused by the malformation of the cornea is also true of the astigmatism caused by malformation of the lens or the eyeball. Many cases have been observed in which irregular astigmatism following scars on the cornea have become less or have disappeared.

Many authorities believe that most cases of astigmatism are congenital or that people are born with astigmatism. Others believe that it is usually acquired. I do not know which is correct but I do know that whether acquired or not it can always be benefited or cured by treatment. As this always happens in my experience I believe that astigmatism is always acquired.

After the cornea or front part of the eye becomes affected with an ulcer and the ulcer heals it leaves a scar. The irregular contraction of this scar results in a malformation of various parts of the cornea. Even when the center of the cornea is clear the contraction of scar tissue at some distance away from it changes the shape of the central part of the cornea in a very irregular way. These cases of corneal opacity are usually benefited or cured by various methods employed to obtain relaxation. In general I believe that the long swing always helps and that practice of the short swing of the normal eye is usually followed by a permanent cure. Some cases of corneal astigmatism of considerable degree, 5D or more have been cured by practice of the swing.

In the November issue of [BETTER EYESIGHT](#), page two, is described the [VARIABLE SWING](#). One very remarkable case of corneal astigmatism and conical cornea with irregular astigmatism of more than 5D was benefited by the swing described in one visit and sufficiently for the patient to obtain temporary normal vision without glasses when at the beginning glasses did not succeed in obtaining normal sight. The variable swing has been a great help to many patients.

[Sinus congestion and neck muscle tension can cause astigmatism: vertical, parallel, criss-cross pattern lines on a sidewalk... moves, looks abnormal, causes dizziness. Use a warm steam humidifier with pure filtered water. Use a nasal pot to rinse the sinuses with warm water and pure organic salt. Local honey acts as a natural immunity against pollen. Honey is made from the bee pollen collected from the flowers, grass...in the environment that the person is allergic too.](#)

Thumb, Finger Movement Swing

Recently a patient thirty years of age, suffering from squint, near-sightedness, astigmatism in one eye of minus 5D with myopia and astigmatism in the other, obtained temporary normal vision with the aid of the short swing which was regulated by the feeling of the thumb and finger rubbing against each other, a short distance, a quarter of an inch, from side to side. The patient obtained better vision when the body was imagined to move opposite to the direction of the moving thumb and less benefit when she imagined the body moving in the same direction as

the thumb. In less than an hour she obtained normal vision for a short time. The squint became much less and at times both eyes were straight. I expect this case will obtain a permanent cure in a very short time. However, patients with a considerable amount of corneal astigmatism usually require weeks and months before they obtain a cure.

Astigmatism accompanied with a malformation of the lens is not common. Thirty years ago I treated a young girl for progressive near-sightedness. Her vision with glasses, which were very strong, concave 17D combined with concave 6D.C., was only 20/100. With the Ophthalmometer she had no corneal astigmatism. I removed the lens from one eye when the vision became normal, 20/20, without glasses. The case was exhibited at the Ophthalmological Section of the New York Academy of Medicine and many of the men present afterwards practiced this method of benefiting the imperfect sight of very bad cases of near-sightedness. I believe I was the first one in New York to do this operation as none of the members present recalled that anybody else had performed the same operation or published it. Many surgeons are still doing this operation for the benefit of these cases. I never did it again because my patient was not permanently benefited; the myopia or near-sightedness returned. The other eye also had 6 diopters of astigmatism with the cornea normal. For a time relaxation methods improved this eye with the astigmatism of the lens but before she had obtained a cure she stopped treatment. I have seen other cases of astigmatism accompanied by a malformation of the lens and usually a temporary improvement in the vision can be obtained. Some of these cases have been cured. Many cataract patients have an irregular astigmatism produced by the malformation of the lens. After the cataract is cured the astigmatism disappears.

The treatment of astigmatism in my hands has been very encouraging. It is so easily produced that it seems to be just as easily relieved. It is so very common that one should realize the facts and study these cases to obtain prevention and cure. School children acquire astigmatism very frequently and it can always be prevented by methods described in the August issue of each year of BETTER EYESIGHT. I am quite sure that the fact that treatment always improves or cures acquired astigmatism in school children, that it more readily prevents it. I cannot refrain from again repeating what I have said so often before that the people of this country must wake up and look after the eyesight of the coming generation, and, on account of the enormous number of children affected with astigmatism some radical steps should be taken for the benefit of the eyes of school children suffering from astigmatism.

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November, 1922

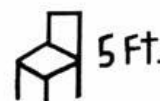
THE VARIABLE SWING
(Oppositional Movement)

(Conical Cornea Cured)

RECENTLY I have been impressed very much by the value of the variable swing. By the variable swing is meant the ability to imagine a near object with a longer swing than one more distant.

Example: To move the eyes, head, body left and right and imagine and see oppositional movement 'The Swing'; close objects appear to move 'swing by' in the opposite direction to the movement of the eyes, head, body while distant objects, beyond the close object appear to move with the eyes, head, body in the same direction. The close and distant objects also appear to move against each other in opposite directions. The close object shows the most opposite movement. The distant object shows the least opposite movement. As long as the eyes do not lock onto any objects, at any distance while swinging side to side; the opposite swing is seen. This can be seen when doing the Sway or Long Swing in front of two eyecharts or any stationary objects at close and far distances. A variety of examples for experiencing the variable swing are provided in Better Eyesight Magazines. Far objects do show opposite movement when the eyes shift but; if the head movement turns into the

Treatment for conical cornea and unclear vision.



When looking at, shifting on the letters on the distant eyechart the chair and chart appear to move 'swing', in the opposite direction the eyes move to. The chair shows the most movement, more than the distant chart.

Practice relaxation and shorter shifting on small letters on the chart and see a shorter swing.

Rock the body left and right in front of the chair, chart and see the chair appear to move opposite the movement of the eyes/body and the chart appear to move with the eyes/body in the same direction.

long swing... type of movement then the far objects can appear to move with the eyes.

For example, a patient came to me with conical cornea, which is usually considered incurable. I placed a chair five feet away from her eyes, clearly on a line with the Snellen test card located 15 feet distant. When she looked at the Snellen test card and imagined the letters moving an inch or less (**shifting on the letters**) she could imagine the chair that she was not looking at moving quite a distance. As is well known the shorter the swing the better the sight. Some persons with unusually good vision have a swing so short that they do not readily recognize it. This patient was able to imagine the chair moving an inch or less and the card on the wall moving a shorter distance. She became able to imagine the chair moving a quarter of an inch and the movement of the Snellen test card at 15 feet was so short that she could not notice it. In the beginning her vision with glasses was poor and without glasses was double, and even the larger letters on the Snellen test card were very much blurred. Now, when she imagined the chair moving a quarter of an inch and the Snellen test card moving so short a distance that she could not recognize it, the conical cornea disappeared from both eyes and her vision became normal. To me it was one of the most remarkable things I have seen in years. I know of no other treatment that has ever brought about so great a benefit in so bad a case.

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January, 1924

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.

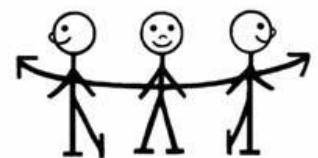
MOST people when they look at stationary objects believe that they see such objects stationary; but if they observe the facts more closely, they find that when the normal eye regards a small letter of the Snellen Test Card with normal sight, the letter does not appear to be stationary, but seems to move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



Variable Swing with finger to side of face. Move the head left and right and see the finger move opposite.



Variable Swing with finger in front, center of face, between the eyes, eye level.



Long Swing

Swing the body left and right. Head/face, eyes, body move together, at the same time, in the same direction. See oppositional movement; objects in the visual field appear to move 'swing by' in the opposite direction. Do not stop to look at the objects. Keep swinging, relax and let them move.

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 at www.clearyesight.info

Swinging

By W. H. BATES, M.D.

Swinging: When the eyes move slowly or rapidly from side to side, stationary objects appear to move in the direction opposite to the movement of the head and eyes.

PEOPLE with normal vision are not always conscious of the swing. When called to their attention, however, they can always demonstrate it, and are always able to imagine all stationary objects to be moving. In imperfect sight,

the swing is modified or absent. This is a truth which has been demonstrated over a long period of years by a great many people, and no exceptions have been found.

The normal or perfect swing is slow, short, easy and continuous. When the swing is normal, it is always true that not only is the vision normal or perfect, but also the memory, the imagination, or the mental efficiency correspond. When the memory is imperfect, the imagination, the mental efficiency, and the sight are also imperfect.

All cases of imperfect sight from myopia, or near-sightedness, become normal when the swing becomes normal. The same is true in cataract, glaucoma, diseases of the optic nerve and retina. For example, a woman, aged sixty-three, was treated for imperfect sight from cataract. Her vision was 10/200, and was not improved by glasses. For twenty years she had not been able to read a newspaper with or without glasses. In three visits, with the help of the normal swing, her vision improved to 10/10 minus, with flashes of normal vision, and she read diamond type at twelve inches rapidly without glasses. Other similar cases have been relieved as promptly.

It is important to understand how the swing can be imagined. Some people with mild cases of imperfect sight can imagine a letter or other object to be moving when they see or remember it perfectly. There are many others who fail. Severe pain, fatigue, or worry often prevent the demonstration of the swing. Blinking and palming are helpful in demonstrating the swing. The distance of the object regarded is important. The patient should be placed at a distance at which he can best demonstrate the swing. The distance varies with the patient.

It is unfortunate that many patients consider the swing complicated or impossible. However, they can usually demonstrate that a stare or strain lowers the vision. When holding a test card at a convenient distance from the eyes, patients may be convinced that the test card is seen better when moving. They may not profit by their experience, but continue to stare or strain, which always lowers the vision.

One patient was unable to imagine any kind of a swing. He was suffering from pain, mental depression, and imperfect sight for the distance. Reading the newspaper, even with glasses, was impossible. Since nothing he tried gave him any relief, I suggested that he stop trying to see and make no effort to imagine stationary objects to be moving. He practiced this while sitting in my waiting room. He paid no attention to the apparent movement of stationary objects, nor did he look at any object more than a fraction of a second. His vision after that improved from 20/50 to 20/10. He became able to imagine the movement of objects and demonstrated that all his pain and mental depression were caused by a stare or an effort to see all things stationary, when he regarded, remembered or imagined them. He was comfortable when he imagined objects moving or swinging, but very uncomfortable when he made an effort or imagined them to be stationary.

Recently, I tested the sight of a girl about ten years old. She read the Snellen card at ten feet with normal vision. She was asked: "Do you see any of the small letters moving from side to side?"

"Yes," she answered, "they are all moving."

"Now can you imagine one of the small letters stationary?" At once she quickly looked away and frowned.

"Why did you look away?" her father asked her.

She replied: "Because it gave me a pain in my eyes and head, and the letters became blurred. Don't ask me to do it again."

The experience of this child is the same as that of everyone, young or old, with perfect or imperfect sight. When the sight is normal and continuously good, to try to stop the swing of a letter or other object necessitates a strain,—an effort which always lowers the vision and produces discomfort or pain in one or both eyes.

It has been repeatedly demonstrated that a letter or other object cannot be remembered or even imagined perfectly and continuously, unless one can imagine it to be moving or swinging. Not only does the sight become imperfect, but also the memory, imagination, judgment, and other mental processes are temporarily lost. These facts should be known to teachers, because they greatly affect the sight, the mental efficiency, and the scholarship of their pupils.

When the memory, imagination and vision are normal, the eyes, the brain and the entire nervous system are at rest. The reverse is also true, for when the muscles and nerves of the body are not at rest, the sight, memory and imagination are imperfect, and the mental efficiency is lessened or lost.

It is impossible to imagine pain, or any symptom of disease and the normal swing at the same time. Children with whooping cough have been immediately relieved by the relaxation obtained from the swing. Many patients suffering from severe attacks of bronchitis have been promptly relieved in the same way. Angina pectoris, pneumonia, trifacial neuralgia, and other serious diseases have also been relieved after relaxation or rest was obtained with the aid of the swing.

The swing is generally beneficial. Some patients obtain more relaxation from one type of swing than from another. The long swing, however, is most helpful in a great many cases.

LONG SWING: Stand with the feet about one foot apart. Turn the body to the right, at the same time lifting the heel of the left foot. The head and eyes move with the movement of the body. Do not pay any attention to the apparent movement of stationary objects. Now place the left heel on the floor, turn the body to the left, raising the heel of the right foot. Alternate. Pain and fatigue are relieved promptly while practicing this swing. When done correctly, relief is felt in a short time. The long swing, when done before retiring, lessens eyestrain during sleep.

VARIABLE SWING: Hold the forefinger of one hand six inches from the right eye and about the same distance to the right. Look straight ahead and move the head a short distance from side to side. The finger appears to move in the direction opposite to the movement of the head and eyes.

DRIFTING SWING: The patient does not think of nor regard anything longer than a fraction of a second. It is helpful in doing this for the patient to imagine himself floating down a river. He may be able to imagine the drifting movement of the boat in which he is floating, better with the eyes closed than with them open. In this case, alternate the imagination with the eyes open and with them closed. The imagination may be improved in this way.

SHORT SWING: When the sight is normal, one can demonstrate the short swing. When it is imperfect, one can demonstrate only the longer swing. When a patient with imperfect sight regards the Snellen test card at ten or fifteen feet, he may be able to imagine one of the letters on the card to be swinging a quarter of an inch or less. The imagination of a shorter swing always improves the sight. Some patients can imagine the short swing better with their eyes closed than with them open. Alternate the imagination of the swing of the letter with the eyes closed and with them open. By repetition, the vision of the letter with the eyes open will improve (at first in flashes, later more continuously), if the memory of the short swing is perfect with the eyes closed.

UNIVERSAL SWING: When the eyes are at rest, they are always moving. When the body is at rest, it can always be imagined, one part in turn, to be moving or swinging. The chair, on which the patient is sitting, is swinging. The floor, on which the chair rests, is also swinging. The walls of the room also swing when the floor swings. When one part of the building swings, one can imagine the whole building to be swinging. The ground, on which the building stands, is also swinging. When the ground swings, other buildings connected with it swing. One can imagine the whole city to be swinging, this continent and all other continents on the earth can be imagined swinging. In short, one can imagine not only that the whole world is moving, but also the universe, including the sun, the moon and stars. The practice of the universal swing is of the greatest benefit, for in this way one can obtain the maximum amount of relaxation.

All objects appear to move, 'swing' in the opposite direction the eyes shift to.
The Figure Eight is a new, improved version of a few different swings combined into one.
Trace up the center and to the left first for correct left and right brain hemisphere activation, integration.

BETTER EYESIGHT

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

July, 1923

The Short Swing

MANY people with normal sight can demonstrate the short swing readily. They can demonstrate that with normal vision each small letter regarded moves from side to side about a quarter of an inch or less. By an effort they can stop this short swing, and when they are able to demonstrate that, the vision becomes imperfect almost immediately. Practicing the long swing brings a measure of relaxation and makes it possible for those with imperfect sight to see things moving with a shorter swing. It is a good thing to have the help of someone who can practice the short swing successfully. Ask some friend who has perfect sight without glasses, in each eye to practice the variable swing as just described, which is a help to those with imperfect sight who have difficulty in demonstrating the short swing.

Nearsighted patients usually can demonstrate that when the vision is perfect, the diamond type at the reading distance, one letter regarded is seen continuously with a slow, short, easy swing not wider than the diameter of the letter. By staring the swing stops and the vision becomes imperfect. It is more difficult for a nearsighted person to stop the swing of the fine print, letter o, than it is to let it swing. When the sight is very imperfect, it is impossible to obtain the short swing. Many people have difficulty in maintaining mental pictures of any letter or any object. They cannot demonstrate the short swing with their eyes closed until they become able to imagine mental pictures.

Henry

By W. H. BATES, M.D.

HENRY first visited me in New York about five years ago. At that time he was attending school in Connecticut. The boy was naturally of a friendly disposition. He had many friends, I do not know that he had any enemies. He always treated me with the greatest respect. I became very fond of him, and I believe he was equally fond of me. He had one virtue, which is not always found in New England or elsewhere; he asked no questions and required no explanations of anything that I might ask him to do. With him it was largely a business to be cured without glasses, and he left the solution of it entirely to me.

At his first visit his vision was less than one-half of the normal. He was wearing concave 1.50 DS, combined with concave 0.25 DC 180 deg. I told him that he was curable and demonstrated the fact by curing him temporarily, improving his sight to 15/10 with the aid of palming, shifting and swinging. He demonstrated that staring at one letter very soon lowered his vision, and that by shifting from one letter to another his vision improved. I asked him if he felt any different when his sight was good and when it was imperfect. He answered, "I know by the feeling in my mind, not my eyes, when I am straining and making my sight poor." This was an interesting statement and is remarkable in this way that he was the first patient I ever had who could realize that his myopia was due to a mental strain primarily. The mental strain produced the eye strain. I asked him if he could remember mental pictures. He said that he could at times with benefit to his sight, but for some reason or other his memory was poor when he had imperfect sight. He demonstrated that when he remembered some letter of some object perfectly he did it quickly, easily and without any effort; but when he strained and tried hard to remember any mental picture he always failed. Furthermore, when he did remember the mental picture he always lost it when he strained or made any effort to remember it better. I spent a good deal of time with him all through his treatment in "Rubbing it in," as I called it. First he demonstrated that his vision was improved and became temporarily normal by resting, by not doing anything. Then, to see imperfectly," he had to strain, to work hard, and go to a lot of trouble. He was a very thoughtful person with a good deal of common sense and became able to profit from his experience.

To me his problem was not learning how to do things with his eyes, but to find out in some way how he could avoid doing anything. He repeatedly demonstrated that when his sight was normal he did not do anything, that anything he did was always wrong or always lowered his vision. He was very fond of shifting because by continually moving his eyes from one point to another, alternately closing his eyes frequently, required the ability to avoid the strain at first occasionally, later more frequently, until he became able to finally avoid the strain continuously. Many of my patients are cured by practicing one of the truths of normal sight, and he was one of them. The normal eye does not stare as long as it has normal sight; it is continually shifting to avoid the stare. He learned how to do this for a while, and then his mind would wander, and before he knew it he was staring and producing imperfect sight. He knew the proper thing to do and knew how to do it, but he often failed and lost his mental control. I said to him one time, "You have a bad habit of straining, you would be better off if you didn't have that habit." One way of getting rid of a bad habit is to acquire a beneficial habit. When you strain it makes you uncomfortable. When you shift and avoid the strain you are comfortable. [\(Shifting - Correct Vision habit\)](#) Surely you should not hesitate to make the right choice. Keep shifting, enjoy yourself and be comfortable. Keep that in your mind a good deal of the time and as long as you are perfectly comfortable you know that you are not straining because the straining always makes you uncomfortable. As long as things are going all right and you are doing the right thing, then you do not need to ask yourself questions about shifting and palming and swinging, you are doing these things when you are perfectly comfortable.

[Shifting part to part on a object and object to object produces relaxation and clear vision. When the eyes can shift small point to small point the vision becomes fine tuned, detailed, very clear. The eyes shift from part to part, object to object but the fovea centralis, exact center of the visual field is shifting tiny point to tiny point producing clearer than 20/20 vision in the center of the visual field.](#)

Here was a boy who, like many boys, had his faults, but somehow or other they were not conspicuous. All his friends spoke well of him, and he had many. His best friend, the one who knew him the longest, was his father. Unfortunately his father was a very busy man, who believed that he was doing the right thing by attending to his work and looking after his business affairs. Someone has said that the principal business of the world is children. If it were not for the children, no country would have a future. I believe this is a true statement and I believe it to the extent that I feel that the principal duty of every man, of every woman, is the business of looking after the children. Of what use is it to accumulate many dollars when your child goes around half blind wearing glasses? He is uncomfortable and not happy because of those glasses. I shall always criticize Henry's father. I do not believe I can criticize him too severely because he did not realize, and I could not make him realize, that for the best interests of his son that he should cure his own eyes for the benefit it would be to Henry. There wasn't very much the matter with his eyes, he could see perfectly at the distance without glasses, he only wore them occasionally when he had to read. Henry could have cured him of that. The father wearing glasses disturbed the mind of the

son, and I have found during all these years that one of the greatest difficulties in curing children is to counteract the evil influence of the parents wearing glasses. Nearsightedness is contagious. Children are great imitators, and they consciously or unconsciously imitate the habits of their parents, even to the smallest detail. I have talked until I was all talked out trying to explain this fact to the parents of children who were wearing glasses. I have tested the sight of many thousands of children in public schools, and was very much impressed to find that in those classes presided over by teachers wearing glasses the percentage of imperfect sight in the pupils was very much increased, while in those classes where teachers did not wear glasses imperfect sight was less frequent. Now, Henry was an easy case to cure, as I said in the beginning; he obtained temporary perfect sight at the first visit. But why didn't he hold it; why did he have so much trouble in obtaining permanent benefit? The answer is that his father was at fault.

Henry enlisted and passed the eye tests without any difficulty. After the war was over Henry called to see me. Of course, my first question was, "How is your sight?" His laconic answer was, "Good."

As he had not been to see me in a long time, some years, I was more or less doubtful about his vision and tested him with a card that he had never seen before. I remember how he stood backed up against the opposite wall in order to get as far away as possible, and the speed with which he read the whole card with normal sight.

"How did you do it?" I asked.

He replied: "Shifting."

Some years later my attention was called to an article in a popular magazine which attacked my method of curing imperfect sight by treatment without glasses. In the next issue of the magazine appeared an article defending me, and signed with the initials of my dear friend, Henry.

July, 1925

SWAYING

It is a great help in the improving of vision to have the patient demonstrate that staring at one part of a letter at ten feet or further is a difficult thing to do for any length of time without lowering the vision and producing pain, discomfort, or fatigue. With the eyes closed it is impossible to concentrate on the memory or the imagination of a small part of one letter continuously without a temporary or more complete loss of the memory or the imagination.

When an effort is made to think of one part of a letter continuously with the eyes closed, the letter is imagined to be stationary. When the imagination shifts to the right of the letter a short distance and then to the left alternately, every time the attention is directed to the right, > the letter is always to the left, < and when the attention is directed to the left < of the letter, the letter is always to the right >. By alternating, the patient becomes able to imagine the letter is moving from side to side, and as long as the movement is maintained the patient is able to remember or imagine the letter. It can be demonstrated that to remember a letter or other object to be stationary always interferes with the perfect memory of the letter. One cannot remember, imagine, or see an object continuously unless it is moving. The movement must be slow, short, and easy.

When patients stare habitually, the eyes become more or less fixed, and are moved with great difficulty. When the patient stands and sways the whole body from side to side, it becomes easier to move the eyes in the same direction as the body moves. No matter how long the staring has been practiced, the sway at once lessens it.

ASTIGMATISM

By W. H. Bates, M.D.

The word has frightened a great many people. When a patient has astigmatism, it means that the shape of the eyeball is changed from the normal sphere to one that is lopsided. One may be near-sighted and have in addition a certain amount of astigmatism. The same is true in the far-sighted eye, which may have at the same time a certain amount of astigmatism. In most cases the front part of the eyeball, the cornea, is the part affected.

In making the diagnosis of astigmatism, the so-called astigmatic chart has been highly recommended. It has been used for more than fifty years and is still popular. The chart consists of vertical, horizontal, and oblique lines.

When a patient has astigmatism, the lines running in one direction appear more distinct than the lines running in other directions. I do not consider the astigmatic chart a very good or reliable test, because many patients with no astigmatism have imagined the lines in one direction to be much plainer than the lines at right angles to them.

Also, in many cases of astigmatism, all the lines may be seen with equal clearness. Another objection to the test is that when some patients with normal eyes and with no astigmatism, regard the astigmatic chart, a high degree of temporary astigmatism has been produced, which was demonstrated by other tests - retinoscope, ophthalmometer.

The instrument for the diagnosis of corneal astigmatism is called the ophthalmometer. When the normal eye was examined with its aid, the curvature of the cornea has been found to be normal in all directions. When the eye was under a strain, the curvature changed, sometimes being more convex in one meridian than in all the others, or one meridian might be flatter than the other meridians. The axis of the astigmatism produced by a strain has been observed to vary, increase or diminish, while the instrument was being used.

When the patient remembered perfect sight, no astigmatism was manifest and the curvature of the cornea remained normal. When a letter or other object was remembered by the patient, one part best-central fixation, no astigmatism was produced. When astigmatism was present, the amount was lessened or it disappeared altogether when central fixation was remembered or imagined. It can be demonstrated that no astigmatism of the cornea can be observed with the aid of the ophthalmometer when the patient is able to remember or imagine letters or other objects by central fixation.

It is also a truth that when things are remembered or imagined to be moving with a slow, short, regular, continuous, easy swing, no astigmatism is present when the cornea is examined with the ophthalmometer. The demonstration cannot be made by an observer who does not understand what is meant by the ocular swing. Rapid blinking also lessens or corrects corneal astigmatism temporarily or more continuously when done properly. When done under a strain, astigmatism may be produced or increased. The ophthalmometer demonstrated the facts.

Sun-gazing, when practiced in such a way as to improve the vision, also is followed by an immediate benefit to the astigmatism, as observed by the ophthalmometer.

It has been noted that after the eyes are closed ([palming](#)) for some minutes or longer, and rested, when they are first opened, an immediate improvement in the astigmatism is manifest.

Any form of treatment which was a benefit to the vision of the patient was also a benefit to the astigmatism, as demonstrated by the ophthalmometer.

The textbooks on the eye have for many years published that most, if not all, cases of astigmatism occur at birth, or that they are congenital. It was supposed to be a permanent condition, but further study of astigmatism has shown that it may be acquired at any age. School children have been observed to acquire astigmatism at the age of eight, ten, fifteen years, or older. When the eyes were examined periodically, the astigmatism in many cases had changed. It is capable of increasing or of decreasing. It is an interesting fact that some cases do recover without treatment. This suggests the possibility of successful treatment.

In the normal eye astigmatism can be produced by a strain to see either at the distance or at the near point. At first it is temporary, but later may become more permanent. Astigmatism can always be corrected by relaxation or rest. When the imperfect sight of astigmatism can be corrected by glasses, it is called regular astigmatism, but when the vision cannot be improved to the normal in this way, it is called irregular astigmatism.

Many scientific articles have been written on irregular astigmatism which are offered as evidence that it is incurable. The men who wrote these articles did not cure irregular astigmatism and, therefore, being authorities in the medical profession, they stated that nobody else could cure it; and, furthermore, anyone who claimed to be able to cure this form of astigmatism must be a charlatan, and should be expelled from the medical profession. Irregular astigmatism is produced by eyestrain and relieved or cured by relaxation or rest. Most cases of ulceration of the front part of the eyeball, the cornea, produce a scar which is more or less opaque. Irregular astigmatism is also caused by ulceration of the cornea.

Patients who cannot stand the light, photophobia, suffer very much from eyestrain. These cases acquire astigmatism which is usually corrected by encouraging the patients to become accustomed to the strong light of the sun. Ulceration of the front part of the eye occurs quite frequently in young children who live in the tenement houses where the light is poor. Astigmatism is found after the ulcerations have healed. Irregular astigmatism has usually been cured by the sun treatment with the aid of the swing, central fixation, and the memory of perfect sight.

Advanced cases of conical cornea have irregular astigmatism, which heretofore has not been relieved by various kinds of operations, glasses, or any other form of treatment. In this disease the front part of the eyeball becomes much thinner and an opening may form with great harm to the eye. In one of my early cases conical cornea occurred in both eyes with one very much worse than the other. It reminded me that when the eyeball is elongated in nearsightedness or myopia, the bulging appears at the back part of the eyeball, which has been called Posterior Staphyloma. These cases have recovered after a long period of treatment. A temporary cure has been demonstrated with the aid of the ophthalmoscope by the memory of perfect sight. The same is true of conical cornea, which also disappears temporarily with the aid of the memory of perfect sight. These cases become worse by the memory of imperfect sight. Staring always increases the bulging and makes the vision worse. Conical cornea with its irregular astigmatism, occurs not only in adults but, like near-sightedness, is found also in

young children. For such cases the swing has been a great benefit. The mother or nurse can stand facing the child, take both hands and sway from side to side for several minutes or longer. Teaching the child to dance is also a great help. Playing games requiring movement, like running, prevents the stare or strain in most cases. It is well to remember, however, that when the child is moving more or less rapidly from one place to another, the stare is always possible. Encourage the child to look from one place to another. The old-fashioned game of "Puss in the Corner" is a great benefit to the eyes. In this game the child is constantly shifting his eyes from one place to another.

The child should enjoy the games, especially when adults join in the game. Often times a young patient will become quite boisterous and scream with excitement and pleasure. He may be as noisy as he likes. He may play, laugh, and scream and become very much excited with great benefit to the astigmatism. It is well to exclude all children who carry around with them a grouch, or who make the patient uncomfortable by teasing him. In my office there have been times when a child made so much noise that my other patients were interested, and too often, perhaps, disturbed. Between the mother, the child, and myself, we have had quite a riot with a great deal of noise and loud laughter on the part of the child, but always the astigmatism improved. Anything that helps the child is justifiable. Don't forget that children, as a rule, enjoy themselves more when they are allowed to make a noise than when they are expected to stay quite. The kindergarten methods of teaching should be practiced. The Montessori system is also a great help in relieving irregular astigmatism from any cause, as well as conical cornea.

One of my worst cases of irregular astigmatism occurred in a woman, seventy-five years of age, who gave a history of ulcerations of the cornea, for a long period of years. After each attack, opacity of the cornea appeared, and with repeated attacks the opacities increased until the patient was unable to count fingers. She was recommended to sit in the sun with her eyes closed, holding her head in such a way that the sun shone directly on her closed eyelids. Most of the time while she was awake, she practiced the long and the short swing alternately. After a number of months her vision improved so that she became able to thread a needle and do some sewing. She became able to read fine print without the aid of glasses. Her vision for the Snellen test card was also materially improved.

Astigmatism

By W. H. BATES, M.D.

MANY people who have astigmatism often talk about it in a boastful way as though it were a mark of distinction. This is not so strange, considering the fact that so many eye doctors claim that astigmatism does more harm to the eyes and nerves than any other condition. They tell their patients that in order to prevent serious eye diseases, glasses should be worn constantly. Such patients, accordingly, become much worried and are in constant fear of serious eye trouble developing, and probable blindness resulting. It is true that the glasses prescribed may give temporary relief; but no patient under my observation was ever cured or benefited very much by glasses.

Definitions

The normal eye is spherical in shape and all the meridians are of the same curvature. The curvature of the cornea is like that of a segment of a sphere; but when astigmatism is present, it is said to be lop-sided; that is, one principal meridian of the curvature is more convex than the meridian at right angles to it. With an instrument called the ophthalmometer, it is possible to measure all the meridians of the curvature of the cornea. Astigmatism may be simple hypermetropic, simple myopic, compound hypermetropic, compound myopic, mixed or irregular.

In Simple Hypermetropic Astigmatism, one principal meridian of the cornea has a normal curvature, while the meridian at right angles to it is flatter than all the other meridians.

In Simple Myopic Astigmatism one principal meridian of the cornea has a normal curvature, while the meridian at right angles to it is more convex than all the other meridians.

In Compound Hypermetropic Astigmatism, the two principal meridians are flatter than the meridians of the normal eye, one being flatter than the other.

In Compound Myopic Astigmatism, the two principal meridians are more convex than a normal meridian, one being more convex than the other.

In Mixed Astigmatism, one of the principal meridians is flatter than a meridian of the normal eye, while the other principal meridian is more convex than a meridian of the normal eye.

In Irregular Astigmatism, the meridians of the curvature of the cornea are so malformed that no glasses can correct the astigmatism.

Occurrence

Astigmatism is the most common defect of the human eye. Most people with astigmatism have had it since birth. In some cases, it may increase, while in other cases it may become less or entirely disappear. Nine-tenths of the cases of astigmatism are due to imperfect curvature of two or more meridians of the cornea. The other cases of astigmatism are due to imperfect curvature of the lens, or less frequently to a malformation of the eyeball.

Symptoms

When a high degree of astigmatism is present, the vision is appreciably lowered. Usually when vertical lines are regarded, they may appear more distinct than horizontal lines, or the reverse may be true. It was found that so many patients with astigmatism failed to see vertical lines as well as horizontal lines, or had trouble in seeing oblique lines, that a card, called the clock-faced card, was designed with lines at various angles. At one time it was believed that astigmatism could be diagnosed when the patient was able to see horizontal lines on this card better than the vertical lines or vice versa. Some patients with astigmatism could see distinctly the line pointing to five o'clock, while the line at right angles to it could not be seen so well. With increased experience, however, it was found that some patients with astigmatism could see horizontal and vertical lines equally well. On the other hand, patients with normal vision have complained that they did not always see vertical or horizontal lines equally well. A man, sixty years of age, was found to have unusually good vision without any symptoms of astigmatism; but when he regarded a number of vertical, horizontal, and oblique lines, his vision immediately became very imperfect with a production of six diopters of astigmatism. When he closed his eyes and rested them, his vision soon became normal and the astigmatism disappeared.

The standard, old clock face card (astigmatism wheel) is not an effective test for astigmatism and often results in unnecessary eyeglass prescriptions with astigmatism correction. This occurs because the eye doctor tells the patient to use incorrect eye function to see the clock: The patient is told to keep the eyes immobile, looking at only the dot in the center of the clock while at the same time, also trying to see all the lines around the clock in the peripheral field perfectly clear. This prevents central fixation and shifting, two major normal eye functions necessary for clear vision. It also causes temporary strain, blur and astigmatism during the test. Other conditions of the standard card astigmatism test also produce incorrect results.

The resulting unnecessary astigmatism eyeglass prescription causes, increases astigmatism resulting in more vision impairment.

A Natural Eyesight Improvement astigmatism wheel allows the person to look directly at and shift on the lines, one at a time to test for and remove astigmatism. The standard old card is also seen clear when it is used correct with shifting and central fixation.

Astigmatism can appear and disappear in the normal eye without discomfort, notice. Doctors state that the eye/cornea can change shape temporarily due to temporary occasional eye muscle tension, stress, neck tension, sinus congestion, diet resulting in slight astigmatism.

Cause

The cause of astigmatism is always associated with an effort or a strain. In all cases the stare can be demonstrated. An imperfect memory requires an effort or a strain and always produces astigmatism. An imperfect imagination also requires an effort or strain and always produces astigmatism. A mental strain of any kind always causes astigmatism. In the normal eye, astigmatism can be produced with a very slight amount of strain or effort to see. In those cases, however, where a great effort is made for a length of time, the astigmatism becomes very much increased, and may be more or less permanent. Irregular astigmatism is caused by the contraction of scar tissue, either from ulcerations of the cornea or from an incised wound.

Treatment

Some years ago, I published an article in the Archives of Ophthalmology with the title, "A New Operation for the Cure of Astigmatism—A Preliminary Report." In this article, I described an operation in which the more convex meridian of the cornea was incised at right angles to its curvature, but not penetrating into the anterior chamber. The scar produced by the cut of the knife usually healed very promptly, and the traction of the scar tissue flattened the curvature of this principal meridian. A number of cases were reported with good results. It was not very long,

however, before I had some unsuccessful experiences in which, for some reason or other, the operation failed. The theory was so good that I expected the facts to verify it. I became disappointed with my operation and did not investigate the facts any further after the first six months. A year or two later, my operation was performed by some one in England, and a report of some interesting cases that were apparently cured was published in an English Medical journal. Other articles were published in medical journals, confirming my earlier claims and giving me due credit.

I no longer believe that an operation of any kind should be performed, because all forms of astigmatism can be demonstrated to be always temporary. Astigmatism is not organic; it is always functional, even when scar tissue is associated with it.

Scar Tissue

It is very interesting to observe cases of astigmatism in which scar tissue of the cornea is a complication. Scar tissue, as is well known, is composed largely of new connective tissue. With the aid of the memory and the imagination, this connective tissue sometimes disappears in a very short time. When the memory is perfect for some letter, color, or object, the scar tissue disappears. When the imagination is perfect for a letter or other object, the scar tissue disappears. Imagination or memory of perfect sight is a cure for astigmatism.

Conical Cornea

The most serious effect of astigmatism is to produce conical cornea. In this disease, the front part of the eyeball becomes more conical in shape, and after some years the apex of the cone becomes ulcerated: This ulcer becomes steadily worse with an increase of the astigmatism. Not only is the vision progressively lowered, but the patient may also suffer from severe pain. There is no operation which has been generally accepted which is satisfactory in correcting conical cornea, nor has any treatment heretofore practiced been curative or even beneficial.

The treatment in my experience which has yielded the best results is the practice of the variable swing. The patient holds the forefinger of one hand about six inches in front and to one side of the eyes. When he moves his head a short distance from side to side, the finger appears to move in the direction opposite to the movement of the head and eyes.

While practicing the variable swing, the patient is directed to regard one known letter of the Snellen test card at ten or fifteen feet, and imagine it as well as he can with his eyes open for a few seconds. The eyes are quickly closed while the patient remembers the same letter more perfectly than it was seen. He then opens his eyes and imagines the known letter on the card, as well as he can for a few seconds. The patient alternately remembers the known letter perfectly with the eyes closed and imagines it with the eyes open for a few seconds, until he becomes able to imagine he sees the known letter nearly as well with his eyes open as he can remember it with his eyes closed. By this method, the patient can improve his vision for each known or unknown letter of the Snellen test card. It is remarkable how promptly the conical cornea subsides when the variable swing is practiced in this way. Some patients have obtained normal vision in a much shorter time than one would expect.

Case Reports

Recently a man, aged sixty years, was treated by me for the relief of eye troubles, caused by one-quarter of a diopter of astigmatism. He suffered intensely from strong light and complained of floating specks. He was not able to read fine print with or without glasses for any length of time without pain and fatigue. It seemed very strange that he should suffer so much from so low a degree of astigmatism. His distant vision was almost normal, while his ability to read was only slightly impaired by the pain. When his astigmatism was corrected by treatment, his vision, with each eye, for distance improved until it became normal, and the floating specks disappeared. After practicing the swing and improving his vision for the Snellen test card, the fatigue which he had felt when working and reading was also lessened. He no longer suffered from discomfort in the strong light of the sun, after he had received the sun treatment with the sun-glass.

Hypermetropic Astigmatism

About a month ago, a fourteen year old girl came to me for treatment. She had about three diopters of hypermetropic astigmatism in each eye. The vision of each eye was one-half of the normal. After practicing rest and the short away of her body for an hour or longer, her vision became almost normal without glasses. Without any treatment, she read the fine print imperfectly at twelve inches. She was directed to close her eyes and to imagine the spaces between the lines to be as white as snow, white starch, whitewash or a white handkerchief. With her eyes open and moving her head a short distance from side to side, she became able to imagine the white

spaces between the lines to be more perfectly white. By alternating, her imagination of the white spaces increased, until she became able to read diamond type at six inches or less, without any fatigue or discomfort. Her ability to read had been improved by her imagination. When her symptoms were relieved by this treatment, it was found with the aid of the retinoscope that the astigmatism had disappeared.

Compound Myopic Astigmatism

Another patient was a girl, aged fifteen. The vision of the right eye was one-third of the normal, while that of the left eye was one-fifth of the normal. She was wearing glasses for the correction of compound myopic astigmatism, in which the astigmatism in each eye was less than one diopter. With the aid of paining, swinging, and the use of her imagination, her vision became normal in each eye and the astigmatism disappeared. This patient had but one treatment and obtained a quick cure, which is very unusual.

Simple Hypermetropic Astigmatism

On June 1, 1924, a man, thirty years old, became a patient. The vision of his right eye was 10/70, while that of the left eye was 3/200. For the correction of astigmatism, he was wearing a convex 5.00 D.C. in the right eye and convex 5.50 D.C. in the left eye. His glasses were not satisfactory, and he suffered from double vision. He could not remember mental pictures or read fine print.

After palming, swaying, flashing and blinking, his vision was temporarily improved and the double vision disappeared. He obtained a considerable amount of rest from the drifting swing. The universal swing was also a great benefit. His ability to read was improved by having him imagine the white spaces between the lines of black letters to be whiter than they really were. It helped when he imagined that he was painting the white spaces with white paint, alternately with his eyes closed and with his eyes open. His vision was very much improved by the imagination of the white centers of most letters to be whiter than they really are.

His visits were irregular. Nevertheless, on October 22nd, the, vision of the right eye had improved to the normal, while the vision of the left eye had improved to 15/70. With the aid of the retinoscope, it was demonstrated that the astigmatism of the right eye had entirely disappeared, while that of the left eye was very much reduced. The histories of these cases indicate the possibilities of relieving all degrees of astigmatism without the use of glasses.

Emily C. Lierman and W. H. Bates, M.D., take this opportunity of wishing you a Merry Christmas and a Happy New Year.

They desire to thank you for your interest and hope that the Better Eyesight Magazine will be improved upon in the New Year.

BETTER EYESIGHT

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

MAY, 1927

Demonstrate

1 - That a short, swaying movement improves the vision more than a long sway.

Place the test card at a distance where only the large letter at the top of the card can be distinguished. This may be ten feet, further or nearer. Stand with the feet about one foot apart and sway the body from side to side. When the body sways to the right, look to the right of the card. When the body sways to the left, look to the left of the card. Do not look at the Snellen test card. Sway the body from side to side and look to the right of the Snellen test card, and alternately to the left of it. Note that the test card appears to be moving. Increase the length of the sway and notice that the test card seems to move a longer distance from side to side. Observe the whiteness of the card and the blackness of the letters. Now shorten the sway, which, of course, shortens the movement of the card. The card appears whiter and the letters blacker when the movement of the card is short, than when the movement of the card is long.

2 – Demonstrate that when the eyes are stationary, they are under a tremendous strain.

Stand before the Snellen test card at a distance of fifteen or twenty feet. Look directly at one small area of a large letter, which can be seen clearly. Stare at that part of the letter without closing the eyes and without shifting the eyes to some other point. The vision soon becomes worse and the letter blurs. Stare continuously, and note that the longer you stare, the more difficult it is to keep the eyes focused on that one point or part of the letter. Not only does the stare become more difficult, but the eyes become tired; and by making a greater effort, the eyes pain, or a headache is produced. The stare can cause fatigue of the whole body when the effort is sufficiently strong and prolonged.

Hypermetropic Astigmatism

By Dr. H. M. Peppard

Last fall a young man presented himself to me for examination complaining of headache, nervousness, insomnia and eyestrain. He had previously had a nervous breakdown and said he felt as if he were going to have another. This statement was apparently correct if general appearances can be considered as an indication. The eyes were bulging with a dry, glassy appearance and the upper lid markedly retracted.

The eye examination revealed a very hard eyeball with 1.25 diopters of hyperopia with 2.50 diopters of astigmatism with the axis 180° . Glasses had been worn but gave little relief. The visual acuity was 20/50 for both eyes and the same in each eye.

Treatment by the Bates Method was started on August fourth. Palming, swinging, blinking, flashing and reading of diamond type was used. The flashing was especially beneficial.

On August 27th, the eyes were again tested. Visual acuity was 20/15 for both eyes, 20/15 in the right, and 20/20 in the left. The hyperopia or farsightedness was not present and the astigmatism was decreased to 1.00 diopter. A few more treatments relieved the remainder of the astigmatism and the vision improved to 20/15 in each eye.

With the improvement in vision, the general symptoms cleared up. He became able to sleep, was free from headaches and was not so nervous.

The eyes felt comfortable and his entire facial expression was changed from the relaxation around the eyes. The eyes no longer were starey, but bright and moist and the blinking frequent and easy. Six months later the eyes were in perfect condition and the patient no longer feared a nervous breakdown.

Astigmatism

(and Conical Cornea)

By W. H. Bates, M.D.

Astigmatism occurs in nearly all cases of imperfect sight for which glasses are employed to improve the vision. It is so often observed in many eyes soon after birth that many writers have stated that it is congenital and not acquired. The majority of statistics, however, show that astigmatism is usually acquired. As a general rule we may say that it always is a complication of myopia and less often of hypermetropia. In nine tenths of the cases, the astigmatism is due to a malformation of the cornea. Some writers have published accounts of cases of astigmatism produced by organic changes in the eyeball without necessarily producing corneal astigmatism.

Astigmatism frequently is recognized to be always changing. Without interference or treatment the astigmatism may increase to a considerable degree or it may become less and even disappear altogether.

The vision in most cases of astigmatism can be improved by the use of proper glasses. However, there are some forms of astigmatism in which no glasses can be found to correct the error. In regular astigmatism, two meridians of the cornea are at right angles to each other. Astigmatism often follows inflammation of the cornea. After the inflammations and ulcerations of the cornea have healed, they may leave behind scar tissue, which by its irregular contraction produces irregular astigmatism. In such cases, glasses seldom or never improve the vision, but it has been helped by relaxation methods.

When astigmatism is present, eyestrain is usually manifest. It should be more widely published that regular astigmatism, although not benefited by proper glasses, has been improved or cured by the practice of central fixation. A perfect memory for letters and other objects is a cure for astigmatism.

Conical cornea is usually acquired. In the beginning, the astigmatism which is produced or acquired is slight. After some years, however, the conical cornea will increase to a considerable degree. The astigmatism is so irregular that no operations on the cornea to correct this malformation have succeeded. The pain caused by conical cornea may become so severe that some physicians have recommended that the eye be removed. The treatment of conical cornea with the aid of central fixation has relieved pain in many of these cases. It is not right to ignore central fixation as a cure for conical cornea. Many eye doctors have condemned the treatment without a proper investigation.

Patients who suffered from conical cornea have consulted numerous physicians to obtain relief. These physicians too often informed the patients that there was no relief known to medical science to lessen pain in severe cases and improve the vision in conical cornea. Some of these unfortunates, after obtaining the opinion of prominent physicians, have been cured by central fixation and then returned to the specialists who had previously given them a bad prognosis. In some cases I have heard that these physicians were so annoyed by the report of the cured patient that the interview was not always a pleasant experience.

The results obtained in the treatment of astigmatism of all kinds, without glasses, and by the methods I have recommended, have been very gratifying.

Some cases of irregular astigmatism suffer an unusual amount of pain in ordinary daylight. After the eyes become accustomed to the sunlight or other forms of light, the astigmatism becomes less when measured with the help of the ophthalmoscope, retinoscope, or the ophthalmometer. No matter how sensitive the eyes may be to different forms of light, gradual exposure of the eyes to the same degrees of light has benefited the patient.

In the beginning of treatment, the strength of the light used should be less than will be used later on after the eyes have become more accustomed to the strong light. It is an interesting fact that eyes which have normal vision without astigmatism seem able to stand a strong light reflected into the eyes much better than can patients whose eyes are imperfect or who have a considerable amount of astigmatism.

Sunning

When practicing looking at the sun one should not at first look directly at it unless the eyes are normal. When becoming accustomed to strong sunlight a patient should move the head from side to side while the eyes are closed. Many people have observed that when looking at distant electric lights, the lights observed were imagined to be moving. When the lights did not appear to be moving, movement of the head and eyes from side to side would produce an apparent movement of the distant light. Patients who were able to look directly at the sun without any discomfort whatever volunteered the information that looking at the sun was not disagreeable, providing one imagined that it was moving from side to side. [Shift the eyes left and right, side to side of the sun and move the head/face with the eyes. Shift top and bottom, circle the edge of the sun counter-clockwise and clockwise.](#)

The treatment of astigmatism is a matter of importance because for many years no methods of treatment were at all successful. One of the most successful methods of treating astigmatism is to encourage the patient to remember, imagine, or see letters of the test card perfectly. The patients are encouraged to commit the card to memory. When letters or other objects are memorized perfectly, the astigmatism always becomes less until it disappears altogether. This is a truth to which there are no exceptions and suggests a method of treatment which should always prevent or cure imperfect sight produced by astigmatism.

With the consent of the principal of a large school in New York City, I placed a Snellen test card in all the rooms of the school. The principal asked me how I could prevent the pupils from memorizing the card. She was told that it was planned to encourage the pupils to memorize the card, because letters on the Snellen test card could be remembered, imagined, or seen best after they were memorized. She was also told that the teachers could help materially in the prevention or cure of astigmatism.

[Looking at familiar, clear objects relaxes the mind, eyes, keeps the vision clear at all distances.](#)

The principal shrugged her shoulders and said that she would not be a party to any such foolish plan and that she would not allow any of her pupils to use the Snellen test card for any purpose whatever. She told some of her friends, however, that she was going to put the card up and encourage the children to memorize it and then prove that she knew more than the Doctor, namely that the Snellen test card memorized was of no benefit whatever in curing astigmatism. She also admitted that she did not know the first thing about astigmatism and did not want to know anything about it.

At the end of three months I called on the principal again. A friendly teacher told me that my enemy was gloating over the prospect of finding out how little most doctors knew about the eye. She seemed very glad to see me and shook hands and smiled and said that they were all ready to test the sight with the Snellen test card and find out how much good had been done by its use.

First she examined the sight of all the children and compared it with a record that she had made previously. She was not satisfied with the result and asked another teacher to test the sight of the children and report. Quite a number of teachers were present at this second examination as well as at the first and the number of visitors increased until there were more teachers than there were pupils. Everyone was anxious to know the result of the trial.

It was a shock to all the teachers who tested the sight of the children to find that the vision of every pupil had

improved and many children wearing quite strong glasses for the improvement of astigmatism had read the card perfectly without glasses. My enemy was not satisfied; she thought there must have been something queer in my cards so she obtained some strange cards from other teachers and it did not add anything to her peace of mind to find that the vision of the children tested with the strange card was much better than when my card was used. Some patients with astigmatism complain that when they first awaken in the morning their eyes are under a much greater strain than in the afternoon. When such cases are examined with the aid of the retinoscope during sleep, they are found to be suffering from a great strain. The strain is not always apparent; the patient does not always know when it is present. Children are sometimes great sufferers from eyestrain during sleep. Many others have been advised to watch their children during sleep and if they believe the child is straining his eyes, the child should be awakened and taken out of bed. (The mother can tell that the child is suffering from eyestrain if the eyelids twitch and if different parts of the body twitch). The mother should then have the child practice the long swing for a few minutes or longer.

One man came to me suffering great pain almost constantly, which was not relieved by the use of glasses for the improvement of his astigmatism. He was told about how eyestrain during sleep can produce astigmatism, and of the symptoms of astigmatism which were pain, fatigue, and dizziness, and also how much benefit is obtained by practicing relaxation methods more or less frequently during the night. He had no one to call him during the night, so he gave orders to a clerk in a nearby hotel that he should be called by telephone every two hours during the night. When he was awakened he would practice relaxation methods. The relief was considerable and there were mornings when he testified that he was rested and had no symptoms of eyestrain at all. It was a great comfort to him to get rid of his headaches and the agony of pain which he described as being in his eyes and had been there many years.

One patient, a boy about twelve years of age, memorized the Snellen test card so that he could read the whole card of fifty-three letters in less than ten seconds. It was discovered that with the improvement in his memory, his vision for a strange card was also improved and his astigmatism became less and finally disappeared entirely.

Staring

Many people are unable to stare for any length of time because staring is painful, disagreeable, and produces fatigue. However, a boy ten years of age had practiced this staring and had acquired much skill; he was able to outstare any boy or girl in his classroom. He then went to other classes and challenged each boy and girl in those classes to a contest to find out which one could outstare the other. In order to excite their antagonism he called them names, so they stood around him and attempted to outstare him, but he, being in good practice, came out the winner.

The boy's teacher noticed that after some of these staring contests, his eyes became quite inflamed, and his vision was unusually poor. His parents took him to a competent eye doctor who discovered that when he stared he produced a considerable amount of astigmatism. The doctor wanted to put glasses on him but the boy objected; he did not want glasses on because that wouldn't be fair to the others. The doctor said that if he did not get well he would have to wear glasses, so the boy made up his mind to stop staring.

Anyone who can stare and strain to an unusual degree is able to relax the strain. It is interesting to demonstrate with the aid of the retinoscope that staring may produce a very high degree of astigmatism, but always after the staring is stopped the vision improves very much and the astigmatism becomes less. In short, it is more difficult to produce astigmatism than it is to cure it.

A man, aged sixty, suffering from astigmatism, had great difficulty in practicing central fixation, shifting, swinging, and the long swing. After four visits to my office he said that he had obtained no relief from his depression, his headaches, or other symptoms of astigmatism. He was advised to sit in the waiting room and try to do nothing whatever. At the end of this time his vision was tested and found to be normal. He was unable to practice relaxation methods because he made too great an effort, but when he did nothing and made no effort, his vision improved.

Treatment - Astigmatism cures

Astigmatism is caused by a mental strain and can only be cured by complete relief of the strain. Glasses should not be prescribed because they increase mental strain, which is accompanied by an increase in the degree of astigmatism.

To relieve astigmatism, it is necessary for the patient to practice those methods which rest the mind and eyes. Children, when asleep, may acquire in an hour or less a high degree of astigmatism, and the muscles of the face may show a great deal of tension or strain. If this manifest tension can be relieved or corrected altogether, the

retinoscope demonstrates that the astigmatism has become less or has disappeared entirely. When astigmatism is present in young babies, it can be lessened by relaxation methods. The mother can rest the child by swinging it in her arms with a slow, short, easy swing. In children twelve years of age, and older, astigmatism is often acquired, and can be corrected very promptly by palming or swinging.

[Sway, Blink, Shift, Central Fixation.](#)

Adults suffering from various forms of astigmatism are benefited by practicing central fixation, by improving their memory and imagination and by other methods which secure relaxation.

Favorable Conditions

For the correction of astigmatism, we should consider favorable conditions, which promote the best vision. Some patients with astigmatism, perhaps the majority, prefer the illumination to be bright. They can see better in the strong sunlight and the astigmatism becomes less than when the light is dim. Other patients with astigmatism see better, and the astigmatism becomes less or disappears, in a dim light, while it may be very much increased in a bright light.

The distance of the Snellen test card from the eyes is also important. A patient may, at twenty feet, read the card with normal vision, when the astigmatism is not so great. The same patient may read the Snellen test card at ten feet with normal vision and the astigmatism may become worse. Some of these cases are difficult to understand. One patient became worse when the eyes were tested at three feet, but when tested at fifteen feet, the patient read the last line of the Snellen test card and the astigmatism disappeared. Each individual case, in order to obtain the best results from relaxation methods should be tested at a distance which is favorable.

Central Fixation

The normal eye with normal sight sees with central fixation, i.e., it sees best where it is looking and not so clearly where it is not looking. The astigmatic eye sees with eccentric fixation, i.e., it sees best where it is not looking. It is important, therefore, that patients with astigmatism consciously practice central fixation until it becomes an unconscious habit. ([Correct Vision Habit](#))

For example, one may look at the notch at the top of the large letter "C" of the Snellen test card and observe that the notch is seen best, while all other parts of the letter are seen worse. When one looks at the bottom of the large letter and sees that part best, the top is not seen so clearly. With the use of the retinoscope, it can be observed that the astigmatism has become less or disappeared altogether when this is done correctly.

One may look at the lower left hand corner of a white pillow and see that corner best, while the other corners are not seen so well. The patient should then look at the upper left hand corner of the pillow and see that best and the other corners worse. By looking at each corner of the white pillow in turn, the corner regarded will be seen best while the other corners are not seen so clearly and the vision of the whole pillow will be improved. Not only is the form seen better, but the whiteness is also improved by using central fixation. With the eyes open or closed, the memory of the pillow is also improved. [Shift part to part on any area of the pillow – left and right, top and bottom, corner to corner, middle...](#)

Shifting

The normal eye with normal sight is constantly shifting from one point to another and does not hold one point longer than a second. It may shift only a short distance, a quarter of an inch or less, and then back again to the point previously regarded. Patients with astigmatism stare or make an effort to see. When a letter or other object is regarded, they attempt to see the whole letter or object at once, they may concentrate on one point for a continuous period of time, thereby increasing the astigmatism.

Memory and Imagination

The normal eye has no astigmatism when the memory and imagination are perfect. The memory of a perfect letter "O", with a white center imagined whiter than it really is, can be accomplished easily, promptly, continuously, without effort, pain, or fatigue. The memory of the same letter, with the white center covered over by a gray cloud which blurs it, requires a stare or a strain to see or to remember, and astigmatism is manifest. A letter may be remembered imperfectly for a few seconds, but this is difficult or impossible to do for an appreciable length of time. The gray blur constantly changes and always becomes worse or more blurred when the effort to see or remember increases.

A perfect memory can only be obtained when the sight is perfect. A large area of white ([white area of the page](#)) can usually be remembered perfectly because it is seen perfectly. By regarding a white area alternately with the eyes

open and closed, the memory is improved and the astigmatism is lessened.

When the memory is improved, the imagination usually improves. Since we can only imagine what we remember, in order to imagine letters or other objects clearly or perfectly, a good memory is necessary.

Case Report - I

A man, aged sixty, was treated some years ago. At his first visit, he was asked to regard a white pillow resting on a table. He was told to close his eyes and remember it. When he did this, he remembered a black pillow instead of a white pillow, which surprised him very much. By having him see each corner of the pillow in turn, with his eyes open, his vision for the white pillow was improved, and when he closed his eyes he was able to remember a white pillow.

Case Report – II

A girl, eight years old, had a high degree of astigmatism in each eye. The vision of the right eye was 5/200, one fortieth of normal, while that of the left eye was only 3/200 or one sixty-sixth of normal. The left eye habitually turned in,—internal squint. The child was very bright and seemed to realize the value of central fixation almost from the beginning. By practicing central fixation and regarding the Snellen test card first at ten feet and later at twenty feet, the vision of each eye improved, so that in about a week the vision was normal in each eye and the left eye became straight permanently.

The patient's near vision was also tested. At ten inches, the usual reading distance for the normal eye, the patient by practice became able to imagine one part best of capital letters and, later on, of smaller letters. In about two weeks, she read diamond type at six inches by central fixation. The retinoscope indicated no astigmatism and no malformation, of any kind, of the eyeball. This young child acquired what may be called microscopic vision. In three weeks she became able to read very fine print with the paper in contact with the eyelashes of either eye, and very small objects were seen close to her eyes with the same clearness as they were seen with the aid of a microscope. For example, she could describe red blood corpuscles and white blood corpuscles mounted on a glass slide when held in contact with the eyelashes of either eye. The child was benefited or cured by the practice of central fixation. Although the results were very gratifying, the child received so much attention by exhibiting her ability to see, that I was very much relieved when the family left New York for a distant city taking the prodigy along with them.

Conical Cornea

The question has often been asked if relaxation treatment benefits conical cornea with its large amount of irregular astigmatism. The contraction of the superior and inferior oblique muscles (**when tense, functioning abnormally**) squeezes the eyeball and increases the length of the optic axis. As a result of this pressure, the back part of the eyeball becomes thinner and bulges backwards with the production of irregular astigmatism. The scientific name for this bulging of the back of the eye is "Posterior Staphyloma." Less frequently, the front part of the eye, the cornea, may bulge in the form of a conical mass and is accordingly termed "conical cornea."

Since a strain causes the bulging of the back part or the front part of the eyeball, rest or relaxation of the strain should be and is followed by relief.

Conical cornea is a very painful, complicated disease of the eyes. The vision is always lowered and usually continues to grow worse from year to year. In the beginning, simple astigmatism with a clear cornea can usually be demonstrated in these cases. The amount of the astigmatism may be two diopters or less, and the impaired vision may be improved to the normal with a weak astigmatic glass. The bulging of the cornea increases slowly or rapidly and an ulcer appears near the center of the cornea where the parts are more severely Inflamed. The astigmatism becomes the irregular type, in which glasses are not able to improve the poor vision to the normal. A school teacher had been suffering from conical cornea in both eyes. Her vision was only 10/200 in each eye. With strong glasses for compound myopic astigmatism, her vision was improved to 10/50. For a number of years, she had worn glasses which had been made stronger from year to year. Each time that she was tested, stronger glasses were prescribed for the loss of vision during the preceding year. She suffered great pain which was not relieved by the strong glasses. By practicing palming, the variable and universal swings, the pain was completely relieved, and the vision improved to 10/40 without the use of glasses. The relaxation treatment improved her condition, so that she became able to see without glasses better than she had been able to see with them. It is important to realize that the relief from pain was accomplished in about half an hour of treatment and that the benefit was obtained after other methods had failed while she wore glasses.

The stare or strain to see has been demonstrated to be associated with all diseases of the eyes, and is the cause of

all imperfect sight. When relaxation is obtained, the eyeball may at once become normal in form with normal sight. Anything that is done with an effort to improve the vision is wrong and always fails. The benefit is only temporary when the stare is only relieved temporarily, but it is always a permanent benefit when the eyestrain is continuously relieved.

Shifting, central fixation, relaxation causes the eye muscles to relax, the eye returns to normal shape, conical cornea, astigmatism... are removed.

Astigmatism

By Emily C. Lierman

During the holidays, a woman came to me for treatment and brought her prescription for glasses with her. She told me frankly that she was doubtful that I could cure the mixed astigmatism with which she had been troubled for so many years and which was getting worse from day to day. She was seventy years old and had worn glasses for reading and for distance for about twenty years. During the past few years she had suffered considerable pain in the back of her eyes. The pain was more intense on bright, sunshiny days, and because of the pain and discomfort caused by the light, she always wore a large hat as a protection from the sun and she frequently wore dark glasses.

The copy of her prescription for glasses showed that she had hypermetropia and mixed astigmatism. The vision of her right eye was better than that of the left for the distance, namely 10/50, but all the letters of the card were blurred. The vision of her left eye was 10/70. When she looked at me, she had no wrinkles in her forehead and her eyes were open in a natural way. When she looked at the test card, there immediately appeared more than a half dozen wrinkles in her forehead and her mouth became distorted as she tried to read the letters for me.

I directed her to palm her closed eyes and, instead of telling her to remember a letter of the test card, which is something I usually direct the patient to do while the eyes are closed and covered, I asked her if she had a flower garden. She answered, "Yes." I noticed how nervous she was and promptly proceeded to make her more comfortable by giving her a foot-stool, and a pillow to rest her elbows while palming. She said that she could easily remember the different flowers which she had planted herself and that it was always a pleasure to spend a great deal of her time in the garden watching the flowers grow. I asked her to name the different flowers and also to mention their colors.

We spent about five minutes' time in this way. Then I removed the footstool and cushion and had her stand as I taught her the universal swing. Swaying to the left, she got a glimpse of the tops of buildings from my office window. When she swayed to the right, she was told to glance at the test card on the wall ten feet away and to keep up the universal swing all the time. Her vision improved in less than ten minutes to 10/30. By reading one line of letters and then another, as I directed her to do, swinging and blinking with each sway of the body, the vision of both eyes improved to 10/10. After one hour's treatment, the pain in her eyes had disappeared also.

She complained that she might not be able to do as well by herself at home, and was also doubtful whether her astigmatism could actually be cured. I then proceeded to make her sight worse by having her stare as she looked directly at one letter and then another. She soon complained that the pain in her eyes had returned. I felt sorry to think that under my direction she should be so punished. Many times I have heard Dr. Bates say, "If you know how to make your sight worse, you will then know how to improve it". It has always been a disagreeable task for me to have the patient demonstrate this, as I am sensitive to the pain and discomfort that the patient feels. It is only when a patient complains that she is not receiving much help or that she does not understand how her particular case can be cured, that I cause the patient to make her sight worse by doing the wrong thing.

My patient soon discovered that staring and straining caused the pain to return and that it lowered her vision for the distance as well as for the near point.

Oppositional Movement

I placed her by a window and directed her to swing with me as my body moved from right to left. Printed signs on the upper parts of buildings in the distance seemed blurred to her before she began to swing. By noticing that the buildings in the distance moved slightly with her, while the window and curtains up close moved rapidly opposite to the movement of her body, her pain and discomfort disappeared. She noticed also that her desire to see things better, which made her forget to blink, prevented her from improving her vision for the test card. Then she conscientiously kept up the blinking as she kept time with the sway of her body. This pleased her and she was satisfied with the treatment.

Ten days later her vision for the test card had improved to 15/10 with each eye, and the black letters on the white card were clear and distinct. I gave her a small Fundamental card to hold in her hand. Immediately, she held the card off as far as her arm would reach. It was interesting to notice how the strain disappeared from her face when she drew the card further away from her eyes. She was told to close her eyes and then draw the fine print card up to about six inches from her eyes. Then, when she opened her eyes and looked at the card, I held her hand in place

so that she could not move it further away. In an instant, she drew her head as far back as she could from the card. She said that looking at the letters of the card when it was held so close caused an instant pain in back of her eyes and made her feel nauseated.

I told her to quickly close her eyes and drop the card in her lap and forget about it. In trying so hard to please me, she had produced a terrible strain which made me almost as uncomfortable as it did her. I palmed with her as she again described her garden to me. While her eyes were closed, I placed a test card which was fastened on a stand, five feet from where she was sitting. This card was black with white letters. When all else fails to improve the sight of the patient, this card is my greatest help.

I then told her to follow my finger as I pointed to the first letter of each line down to the bottom of the card. I pointed a half-inch below each letter and told her to look in the direction of my finger tip and not at the letter.

[Modern teachers state to look directly at the letters to see them clear. Shift on the letters, relax, blink. Occasionally, take a break and look at, shift on the white spaces to relax the eyes, \(without trying to see the letters\), then look directly at the letters to see, read them.](#) Reading each letter clearly at five feet produced no strain whatever. As she mentioned each letter, she closed her eyes and remembered it.

Following my directions in this way, she became able to look at the white spaces of the small Fundamental card which she again held in her hand at six inches from her eyes. By shifting and blinking from the small letter "o" of the test card at five feet to the white spaces of the small Fundamental card, she read straight down to the finest print of the Fundamental card, line number fifteen. The change in her face was good to see because all signs of strain had cleared away. [When reading the letters on the card, look directly at them, shift, use central fixation.](#)

[Look at the white area of the card only when resting the eyes, not reading the letters.](#)

She practiced at home for several weeks and then came to me again to hear what I had to say about her good sight. She was able to do without her glasses all the time and did not use them again. She wanted to take more treatment if I thought it was necessary.

I tested her eyes and at fifteen feet she read a strange card, which has small letters to be read with the normal eye at nine feet. This card she read with each eye separately and without any effort or strain.

She told me that she had practiced faithfully every day for more than two hours altogether, and had done as I told her to, which was not to put her glasses on again. She practiced the universal swing almost an hour a day. She said that she enjoyed the universal swing so much that instead of counting to one hundred, which I told her was necessary to do in order to know that she was swinging enough for the improvement of her vision and the relief of strain, she practiced for twenty minutes at a time.

It only took me ten minutes to find out that she no longer needed help from me. I told her, however, that she could be sure of a relapse if at any time she punished her eyes by staring or by not blinking enough.

Palming and the universal swing helped her to rest her eyes and to see things moving all the time.

This swing, with the help of the memory of the flowers in her garden, cured my patient.