

# Stories From The Clinic

By

Emily C. A. Lierman, Bates



## *Natural Vision Improvement*

Emily C. Lierman, Bates worked with Ophthalmologist William H. Bates as his Assistant, Nurse. They worked together for many years in Dr. Bates Clinic in Harlem New York City, U.S.A. curing: unclear close and distant vision, astigmatism, crossed, wandering eyes, cataracts, glaucoma, cornea scars, blindness and other eye problems by treatment with natural methods, without eyeglasses, surgery & drugs. Dr. Bates cured Emily's eyesight. They married in 1928. Their work began the Natural Eyesight Improvement Revolution.

Ophthalmologist Bates 'Better Eyesight Magazines' were written by Dr. Bates, Emily Lierman/Bates and other doctors, workers, school teachers at their Clinic to describe the way the patients were cured. Many stories are in the patients own words. True Life Stories. 'Better Eyesight Magazine' contains 'Stories From The Clinic', their patient's various treatments written by Emily Lierman/Bates. Emily placed all the Stories From the Clinic into one book.

Emily was trained by Dr. Bates. Her kind treatment of the children, senior citizens, all ages, races, each individual patient in the Clinic, (a loving mom, nurse, Natural Eyesight Improvement Teacher, Dr. Bates dependable assistant) was a major factor in the many eyesight cures she and Dr. Bates accomplished. Hearing, asthma, nervousness, headache, neck muscle tension, insomnia, various types of pain, movement, balance, coordination, stuttering, memory, imagination and other conditions, brain, body, eye functions were also cured by the Natural Eyesight Treatments.

Eye Doctors preferring to sell eyeglasses, surgery, drugs, destroyed the magazines, stories, hid Natural Eyesight Improvement from the public for over 100 years because Dr. Bates, Emily's treatments, books tell the truth about the cause and natural cure of imperfect sight and other eye problems, disease. This prevents the need for eyeglasses, surgery.



**Emily C. Lierman, Bates**

# STORIES FROM THE CLINIC

By EMILY C. LIERMAN



**Emily C. Lierman, Bates**  
Cured People of Imperfect  
Sight by Natural Treatments.

CENTRAL FIXATION PUBLISHING CO.  
NEW YORK CITY  
Copyright, 1926, By EMILY C. Lierman

TO THE CHILDREN OF THE CLINIC  
AND TO  
W. H. BATES, M.D.,

THIS BOOK IS DEDICATED



**William H. Bates, M. D.**  
Ophthalmologist. Discovered  
the Cure of Imperfect Sight by  
Natural Treatment Without  
EyeGlasses, Surgery, Drugs.

Emily C. Lierman, her eyesight cured by Ophthalmologist William H. Bates, worked as a nurse, assistant with Dr. Bates in his Clinic in New York City, U.S.A. for many years. They married in 1928. Her name then changed to Emily A. Bates. Emily Lierman, Bates is known for her kind, gentle, understanding way of treating, teaching adults and children how to obtain clear eyesight, healthy eyes naturally and her devotion to Dr. Bates work. She continued teaching The Bates Method of Natural Eyesight Improvement after Dr. Bates death and preserved his books, Better Eyesight Magazines.

This book describes the natural treatments that Dr. Bates and Emily applied without use of eyeglasses, surgery, drugs to cure; Unclear Close & Distant Vision, Astigmatism, Presbyopia, Wandering/Crossed Eyes (Squint), Cataracts, Glaucoma, Cornea Ulcers, Scars, Blindness and other eye problems for a variety of patients in their clinic. Children cured by Dr. Bates, Emily, then cured their friends, school teachers, parents with Natural Eyesight Improvement. Dr. Bates patients became Teachers, taught Natural Eyesight Improvement, cured people of a variety of eye conditions.

Emily's 'Stories From The Clinic' were originally published in 'Better Eyesight Magazine' by Ophthalmologist William H. Bates, Central Fixation Publishing Co., New York City, U.S. A. The stories in the book contain a few different, additional sentences, descriptions.



Fig. 8. The Usual Method of Using the Retinoscope  
The observer is so near the subject that the latter is made nervous, and this changes the refraction.

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STORIES FROM THE CLINIC By EMILY C. LIERMAN

Natural Vision Improvement

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## DISCLAIMER & DIRECTIONS

Contact lenses cannot be worn before, during, after practicing Natural Eyesight Improvement. Contacts will not fit the eye, cornea as it changes to normal, healthy shape and function with practice of The Bates Method. Contact lenses can scrape, injure, infect the eyes cornea, eyes, impairing the vision, eyes health. The eye can change shape often with or without practice of Natural Eyesight Improvement. Contact lenses are never a perfect fit to the eye. Avoid wearing contact lenses.

Natural Eyesight Improvement normalizes the eyes pressure, improves eye health. If the reader has any eye condition, Glaucoma... check with your Eye Doctor first before practicing The Bates Method, Natural Eyesight Improvement. Eye drops, drugs, medicine, un-natural treatments for eye pressure may need to be changed, reduced, discontinued.

Natural Eyesight Improvement changes the shape of the eye, cornea back to normal, healthy condition. If eye, retina, cornea, cataract... surgery has been done on the eyes; check with a Eye Doctor first to be sure the surgery and Natural Eyesight Improvement do not conflict, interfere with eachother; with the eye shape, condition the doctor has fit the surgery to. Natural Eyesight Improvement may help the surgery, eye to heal or it may work against the surgery because; Natural Eyesight Improvement brings the eye, cornea to normal shape-but, the surgery may have been done to place, keep the eye in a abnormal shape, the shape it was in before the surgery or a new abnormal shape. Example; Retina surgery done on a eye that is abnormally lengthened due to advanced Nearsight, many years wearing eyeglasses or a injury may act differently if the patient practices Natural Eyesight Improvement and returns the eye to normal, round shape, normal eye pressure, normal fluid, circulation flow... Same warning for eye cornea laser and other surgeries. Possibly cataract lens surgery. Read complete directions in the free PDF E-book and the Laser Cornea Eye Surgery Article at the end of this book.

People have regained clear vision after unsuccessful eye muscle, cataract and other surgery but always check with a eye doctor, preferably a Bates Method, Natural Eyesight Improvement Ophthalmologist, Teacher.



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# Better Eyesight Magazine

By

Ophthalmologist William H. Bates

Original Magazine Pages

## Better Eyesight Magazine by William H. Bates, M. D.

Ophthalmologist - Eye, Ear, Nose & Throat



Ophthalmologist  
William H. Bates

Central-fixation Publishing Co.,  
New York City, New York, USA

### Original Antique Magazine Pages

This E-book contains Photo-Copies of the Original printed pages of 'Better Eyesight Magazine' written and published by Ophthalmologist William H. Bates and his assistant/wife Emily C. A. Lierman/Bates. 11 Years - All 132 Monthly Magazine Issues; July 1919 to June 1930. A History Book, Antique Collection.

Dr. Bates discovered the natural principles, true function of the eyes (Visual System) and applied relaxation, natural methods to return the eyes, eye muscles, nerves, mind/brain, body to normal function with clear vision and healthy eyes. The Bates Method.



Emily C. Lierman, Bates

The Stories, articles in Better Eyesight Magazine describe how Dr. Bates, Emily Lierman Bates, other Doctors, School Teachers, Bates Method Students/Teachers, Children and Parents used Natural Treatments to prevent, remove, many different eye problems without use of eyeglasses, surgery, drugs; unclear close and distant vision, astigmatism, cataracts, glaucoma, conical cornea, cornea scars, wandering and crossed eyes (Strabismus, Squint) and other conditions. Hundreds of Natural Treatments are listed. Dr. Bates used surgery only when necessary.

Better Eyesight Magazine consists of articles that are interesting, positive, fun to read. 'True Life Stories' of the doctors, patients, adults and children. Vision improvement based 'Fairy Stories' and other articles for children are included.

The magazines, books are the original source of Natural Eyesight (Vision) Improvement. The Original Better Eyesight Magazine collection is proof that Ophthalmologist William H. Bates discovered the Bates Method, Natural Eyesight Improvement and is the True Author of the Magazine.

Dr. Bates discovered Natural Eyesight Improvement over 100 years ago. The Optical and Medical Industry/Association and most Eye Doctors, Opticians have hidden Dr. Bates magazines, books, articles, Natural Eyesight Improvement from the public for over 100 years because: The writings are proof that Natural Eyesight Improvement works, produces clear vision, healthy eyes, it teaches people how to obtain clear vision 'on their own' and prevents the need for purchasing eyeglasses, contact lenses, sunglasses, eye surgery and drugs.

Due to the truth about Natural Medicine becoming available to the modern public, Dr. Bates work has been recovered from individual owners and re-published. Many modern Ophthalmologists, Optometrists are now learning, teaching the Bates Method.

*Cataract Number*

## Better Eyesight

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

Vol. IV

JANUARY 1921

No. 1

The Treatment of Cataract  
A Report of a Case

Cataract: Its Cause and Cure  
By W. H. Bates, M.D.

Traumatic Cataract Disappears  
By Margaret Downie

Incipient Cataract Relieved  
By C. L. Steenson, M.D.

Cataract at the Clinic  
By Emily C. Lierman

\$2.00 per year

20 cents per copy

Published by the CENTRAL FIXATION PUBLISHING COMPANY  
342 WEST 42nd STREET NEW YORK, N. Y.

The 8 Correct Vision Habits, (natural, normal, relaxed eye, visual system function): Shifting, Central-fixation, Memory, Imagination, Switching Close and Far, Long Swing, Sunning, Palming and other activities described in this book are derived from Dr. Bates work, magazines.

## Directions for the Original Better Eyesight Magazines

The Original Better Eyesight Magazine contains a few treatments that are no longer taught the old way to Natural Eyesight Improvement students. They have been changed, improved and new treatments, activities added. The E-Book 'Better Eyesight Magazine Illustrated with 500 Pictures' is attached free with this book. Read that modern text version of Better Eyesight Magazine to learn the new correct way a few of the old treatments in the original magazines are practiced.

Treatments, activities must be practiced correct to maintain healthy eyes, clear vision. Blue print and pictures in the text version describe the old, new, and improved treatments and the correct new way to practice them. The text version can also be used to check for correction of the old worn print in some copies of the original pages.



Fig. 8. The Usual Method of Using the Retinoscope  
The observer is so near the subject that the latter is made nervous, and this changes the refraction.

Example of older methods that have been changed;

Open Eyes Sunning is no longer practiced in this way. Closed Eyes Sunning only is practiced.

Some people still practice open eyed sunning but in a specific way: Eyes, head/face continually move, eyes blinking, eyes, head/face shifting to the sky near the left, right, top, bottom of the sun and across the sun quickly. The person faces the sun for a brief time. Other directions are applied for safety.

Modern Bates Teachers teach Closed Eyes Sunning only and with eye, head/face movement. Looking at the bright sky, clouds, trees... away from the sun is allowed.

The Sunglass is used only in special cases of near or complete blindness by an experienced Bates Method Ophthalmologist if other methods fail. It can burn the eye, like a magnifying glass when used incorrect, and, because it is a glass, it blocks full spectrum light resulting in partial spectrum, unbalanced light emitting through, from the glass. The light does not go into the eyes pupil and is not directed at the cornea. It is only directed at the sclera, white area of the eye, but it still must not be overused. Partial spectrum light is unhealthy. Pure full spectrum sunlight, not passing through glass is best, healthy for the eyes, brain, body, clarity of vision. The Sunglass is only a short, temporary treatment to awaken, bring to life and action the cells in the eyes retina, lens... to reverse extreme vision impairment, blindness. Done correct, by a Bates Method Eye Doctor, it is beneficial and will not harm the eye.

Reading by 'first' looking at the white spaces between sentences - Do not try to see, read the print clear while at the same time, looking at the white spaces between sentences. Central-fixation must be used: look directly at the print to see, read it. In Better Eyesight Magazine, Dr. Bates explains in detail in his 'Questions and Answers Page' to: Use central-fixation when reading; Look directly at the object you want to see. First: Look at, move the eyes (visual attention, center of the visual field) along the white spaces between the sentences to relax the mind and eyes. (Looking at the white spaces causes relaxation because there if nothing to see, there is no effort to see anything clear, so, strain is avoided. This enables relaxation of the mind, eyes, eye muscles to occur. The relaxation produces clear vision, a 'Flash of Clarity'.) When the relaxation and clarity occur and the print flashes dark black and clear; then: look away from the spaces, look directly at the black print, place the print in the center of the visual field to read, see it clear. The relaxation and clear vision from looking at the white spaces continues when looking at the print. If it blurs, return to the spaces or Palm to regain relaxation. Then back to the print. Use the memory and imagination when looking at the white spaces: Imagine painting the spaces pure, bright white with a white paint brush and pure white paint while imagining the white space is seen pure, bright, glowing white and clear. Relax, no effort. Move the paintbrush, eyes left and right along the spaces, blink, relax. Practice with the eyes open, then in the imagination with the eyes closed, then open again. Paint with an imaginary paint brush in the hand or use a white Nosefeather. Practice on Fine Print in the Sunlight.

Some people misunderstood Dr. Bates in early times and would try to read the print while looking at the white spaces. Dr. Bates explained to; look at the space or the print; only one at a time, not both at the same time. Looking at, trying to see, think about 2 or more objects at the same time is the opposite of central-fixation: it is diffusion, eccentric fixation and causes tension, strain in the mind, (brain) eye muscles, eyes and unclear vision.

Look at one object at a time for clear vision. This is central-fixation: looking directly at the object of visual attention: first at the white spaces, then the black print, one object at a time, in the center of the visual field.

Palming and imagining, remembering, seeing perfect black on the closed eyes produces perfect relaxation and clear vision. Dr. Bates noticed that some patients used effort to imagine, see black and this prevented relaxation. Dr. Bates states that imagining, seeing black is not necessary to obtain perfect relaxation and clear vision. Remembering, imagining any pleasant thoughts, letting the mind drift from one happy thought, object to another while palming will produce the relaxation and clear vision. Then, black may also appear in front of the closed eyes. If black does not appear, it's alright, it will not make a difference in relaxation, clarity. See the palming chapter for examples.

Square, elliptical...swings - Some of the older swings are now combined into the Infinity, Figure Eight Swing. The Long Swing, Sway (Rock) remain as Dr. Bates created them and are also combined in the Figure Eight Swing.

In later editions of Better Eyesight Magazine and books, Dr. Bates and Emily Lierman, Bates lists these changes.

Dr. Bates himself stated that the Bates Method is continually advancing, being improved. As he treated thousands of patients over the years the Bates Method was perfected. Bates Teachers state they learn much from their patients, students, each student being an individual and various treatments being successful for each condition, state of mind, body, eyes and personality.

A few original magazine pages that are old with unclear print have an additional new clear page attached, typed in present date print. A few misprints are corrected with additional print, leaving the original pages untouched.

Book printing settings for the original pages is best at: darkest black and highest quality. Not too dark or it will smear the print. The Original Antique Magazines will be in Paperback on Amazon.com in 2011-2012.

Distributing this book free to the public is encouraged. Keep this page in the Original Better Eyesight Magazine

E-book that states; The modern version is free with the original book and should also be read to insure correct application of some of the older original practices, treatments.

## Thank-You, in Historical Order

+The University of California Library - <http://www.lib.berkeley.edu/> and the Optometrist - Monroe J. Hirsch (name shown in old print, pictures in this book) and other Colleges, Libraries, Eye Doctors, Emily C. A. Lierman Bates, Bates Teachers, Individual Persons that preserved Ophthalmologist Bates Magazines, Books, hid them from the Optical Industry when these businesses, doctors were destroying Doctor Bates work. The law in Europe allowed preservation of Dr. Bates magazines, books.

+Thomas Quackenbush - <http://www.naturalvisioncenter.com> Bates Method, Natural Vision Improvement Teacher, Author of 'Relearning to See - Improve Your Eyesight Naturally' and 'Better Eyesight - The Complete Magazines of William H. Bates'. He is the first Natural Vision Improvement Teacher to re-publish and bring Dr. Bates work, treatments in Better Eyesight Magazine to the modern public.

+David Kiesling - <http://www.iblindness.org> For creating, bringing the first photo copy of all Dr. Bates Original Better Eyesight Magazines back to the public. Every page, month, year in original antique print type! This proved that Dr. Bates is the discoverer of Natural Eyesight, Vision Improvement, the true source of the Bates Method. Original Pictures of Better Eyesight Magazine Pages and Dr. Bates... were provided, purchased from David.

The following pages provide a sample of the 1919 Better Eyesight Magazine Issue Illustrated with 500 Pictures. Free in PDF form with this book.

## The Following Words Describe Eye Conditions Listed in This Book

+**Emmetropia**=Normal Round Eye=clear distant vision.

Dr. Bates states that the eye lengthens slightly (due to action of the outer oblique eye muscles) to produce accommodation for clear close vision. Other eye doctors state that the lens, or lens and eye, change shape (lens; due to action of the ciliary, inner eye muscle) to produce accommodation, others theorize the lens may move, as in a camera. The iris, pupil size, iris muscle also affects the function of the eye, light rays., clarity of vision.

+**Myopia**=Nearsighted=abnormally lengthened eyeball=unclear distant vision.

+**Hypermetropia**=Hyperopia=Farsighted=abnormally shortened eyeball=unclear close vision.

+**Presbyopia**=abnormally shortened or greatly lengthened eyeball due to outer eye muscle tension, and/or the lens is inflexible, ciliary muscle stiff=unclear close 'Reading' Vision. Extreme neck muscle tension, arthritis lowering blood, oxygen, nutrient flow to the head, eyes, retina, lens and causing neck muscle tension to travel into the outer and inner eye muscles can cause unclear close, distant vision, cataracts and other eye problems.

The Bates Method, nutrition, sunlight, posture, movement., corrects this condition.

Reading fine print cures presbyopia. See the Close Vision chapter and Better Eyesight Magazine.

+**Astigmatism**=irregular, abnormal cornea, lens, eye shape, due to outer, inner eye muscle tension, dysfunction.

Vision/objects are distorted, blurred, unclear in various areas of the visual field at close and/or far distances. Headaches, dizziness can be experienced due to distortion of objects in the visual field. Objects can appear to move, produce a variety of visual effects when the eyes move and the astigmatism area of the eyes cornea passes over objects. It is usually the eye and cornea that have the abnormal shape, not often the lens.

Headaches, sinus congestion, pressure can also affect the eyes nerves, muscles, eye movement, entire eye, eye shape and cause unclear vision, astigmatism, a variety of visual disturbances. Check with your doctor if a sinus infection is suspected. Usually is harmless but occasionally infection can travel. See the Nutrition Chapter for natural prevention of sinus congestion, infection. Extreme neck muscle tension, misaligned neck vertebrae can affect eye muscle, nerve, ear, sinus... function causing many different eye, vision problems.

Relax the neck, stay healthy, use the Bates Method to avoid astigmatism, blur, eyeglasses.

+**Amblyopia**=Amblyopia Ex Anopsia=Dim, low, no vision or less clear vision in one eye, often in a wandering/crossed eye due to lack of use of the eye or the brain shutting off the image in the wandering/crossed eye to prevent double vision. Can occur in both eyes. Can occur in an eye with very unclear, blurry vision.

+**Squint**=Strabismus=Wandering/Crossed/Lazy Eye - Dr. Bates uses the word 'Squint' to describe this condition.

A tense outer eye muscle pulls the eye in, out, up, down... causing strabismus, slow, stiff, un-coordinated eye movement, imperfect convergence, divergence, double vision. The state of convergence, for close vision, divergence for distant vision functions with and affects accommodation for clear close vision, un-accommodation for clear distant vision.

Strain in the mind, left and right brain hemisphere imbalance, one hemisphere or part of the brain not working correct with a eye muscle, not activating its movement or partially activating it can cause strabismus, imperfect eye movement. Exercises, games, Bates Method corrects this condition.

Imperfect Left and right brain hemisphere function, imbalance, interfering with a baby's crawling, natural walking stage, use of baby walkers, (This disrupts natural left and right brain hemisphere development, activation & integration as the baby grows, learns to crawl and walk. The brain, hemispheres work with the eyes, eye muscles, eye development, clarity of vision.), injury from forceps birth delivery, (incorrect handling of the baby at birth, doctors forcing mothers to avoid natural, healthy instincts of safe ways to massage, caress the baby's body, head that naturally insures perfect skull bone alignment after passing through the birth canal, 'like animals do with their tongue'), misaligned skull & eye socket bones and/or neck, back vertebrae, collarbones, other bones, pressure, pulling on nerves, muscles in/along the spine, neck, skull, eye socket can also cause eye muscle tension, eye/eye muscle dysfunction, strabismus, blur, astigmatism and other eye problems. Usually;

Mental strain, eye muscle tension, eyestrain, staring, not shifting, lack of central-fixation and other incorrect use of the eyes, wearing eyeglasses, sunglasses, lack of sunlight, using incorrect posture, is the cause of defective vision; blur, astigmatism, strabismus...

Stress, negative emotions, thoughts, experiences can also strain, tense the mind/brain, eye muscles, cause Brain Hemisphere imbalance and un-coordinated eye muscle function, vision impairment. Stress can temporarily shut off part of the brain, lower certain brain functions, communication with the eyes, eye muscles, retina. Computer use; looking all day at that one close distance, at the artificial 3-D images on the screen can tense up the eye muscles and eye movement in one or both eyes, cause one brain hemisphere to be dominant and one eye to be dominant at close distances, less clear vision at other distances... Divergence when looking to the distance after hours on the computer can be slow, double vision, one or both eyes movement almost frozen for close distance. (Looking at print, images, videos on the computer screen is different than looking at real print, pictures on a piece of paper. The computer screen strains the eyes when overdone.) Diet also affects the eyes health and vision.



Dr. Bates proved that all these eye conditions are most always caused by mental strain, incorrect use of the eyes and outer eye muscle tension placing pressure, pulling, stretching, tension on/in the eye, cornea, lens, retina, distorting their shape, function, disrupting the focus of light rays in the eye, on the retina, impairing blood, oxygen, nutrient, fluid, energy circulation to, in, out of the eyes and tear production. (Tears contribute to clear vision by acting as a natural contact lens and keeping the cornea, eye healthy. People state their vision improves to clear, even cataracts clearing from the eyes after crying. Crying improves eye circulation, cleansing inside and outside the eye, and stretches, relaxes the muscles in the eyes, head, neck, shoulders.)

**Outer & Inner eye muscle tension affects eye, lens, iris/pupil, tear... function, health of the eye, clarity of vision.**

Neck, shoulder muscle tension is a major cause of eye muscle tension, eye muscle and eye nerve dysfunction, impaired circulation in the head, eyes and unclear vision. Extreme neck muscle tension can pull or tilt a neck vertebra temporarily out of alignment, placing pressure, pulling on the nerves in the neck that travel to/connect to the brain stem, brain, eyes, retina, eye muscles, ears. (Eyes, ears, balance and vision are connected, work together.) Blood, lymph vessels can be affected. Neck muscle tension alone can do this to a lesser degree.

The Author, assembler (Clark Night) of this book experienced a crossed/wandering eye condition with astigmatism, double vision, sinus inflammation, congestion, ear ringing, balance impairment from a neck injury, misaligned vertebrae, torn muscles, ligaments, injured nerves in the neck from a dishonest chiropractor. The Bates Method and a new, good chiropractor corrected the eye, vision, sinus condition.

Natural Eyesight Improvement, Dr. Bates Method relaxes the mind/brain, body, eye muscles, eyes, neck, returns all parts of the eye to normal shape, function, circulation, correct focus of light rays in the eyes for healthy eyes and clear vision at all distances.

**THE SWINGING CURE**

If you see a letter perfectly, you may note that it appears to pulsate, or move slightly in various directions. If your sight is imperfect, the letter will appear to be stationary. The apparent movement is caused by the unconscious shifting of the eye. The lack of movement is due to the fact that the eye stares, or looks too long at one point. This is an invariable symptom of imperfect sight, and may often be relieved by the following method:

Close your eyes and cover them with the palms of the hands so as to exclude all the light, and shift mentally from one side of a black letter to the other. As you do this, the mental picture of the letter will appear to move back and forth in a direction contrary to the imagined movement of the eye. Just so long as you imagine that the letter is moving, or swinging, you will find that you are able to remember it, and the shorter and more regular the swing, the blacker and more distinct the letter will appear. If you are able to imagine the letter stationary, which may be difficult, you will find that your memory of it will be much less perfect.

Now open your eyes and look first at one side and then at the other of the real letter. If it appears to move in a direction opposite to the movement of the eye, you will find that your vision has improved. If you can imagine the swing of the letter as well with your eyes open as with your eyes closed, as short, as regular and as continuous, your vision will be normal.

## BETTER EYESIGHT

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

Copyright, 1919, by the Central Fixation Publishing Company  
Editor—W. H. BATES, M.D.  
Publisher—CENTRAL FIXATION PUBLISHING CO.

Vol. I                      OCTOBER, 1919                      No. 4

### SIMULTANEOUS RETINOSCOPY

Much of my information about the eye has been obtained by means of simultaneous retinoscopy.

The retinoscope is an instrument used to measure the refraction of the eye. It throws a beam of light into the pupil by reflection from a mirror, the light being either outside the instrument—above and behind the subject—or arranged within it by means of an electric battery. On looking through the sight-hole one sees a larger or smaller part of the pupil filled with light, which in normal human eyes is a reddish yellow, because this is the color of the retina, but which is green in a cat's eye, and might be white if the retina were diseased. Unless the eye is exactly focussed at the point from which it is being observed, one sees also a dark shadow at the edge of the pupil, and it is the behavior of this shadow when the mirror is moved in various directions which reveals the refractive condition of the eye. If the instrument is used at a distance of six feet or more, and the shadow moves in a direction opposite to the movement of the mirror, the eye is myopic. If it moves in the same direction as the mirror, the eye is either hypermetropic or normal; but in the case of hypermetropia

3

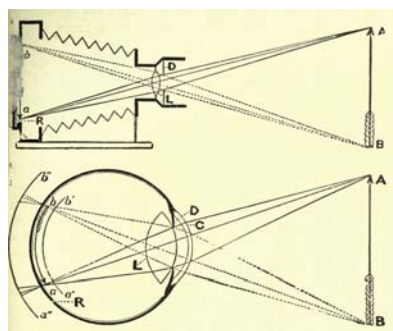


Fig. 5. The Eye As a Camera

The photographic apparatus; D, diaphragm made of circular overlapping plates of metal by means of which the opening through which the rays of light enter the chamber can be enlarged or contracted; L, lens; R, sensitive plate (the retina of the eye); AB, object to be photographed; ab, image on the sensitive plate.

The eye: C, cornea where the rays of light undergo a first refraction; D, iris (the diaphragm of the camera); L, lens, where the light rays are again refracted; R, retina of the normal eye; AB, object of vision; ab, image in the normal or emmetropic eye; a' b', image in the hypermetropic eye; a'' b'', image in the myopic eye. Note that in a' b' and a'' b'', the rays are spread out upon the retina instead of being brought to a focus as in ab, the result being the formation of a blurred image.

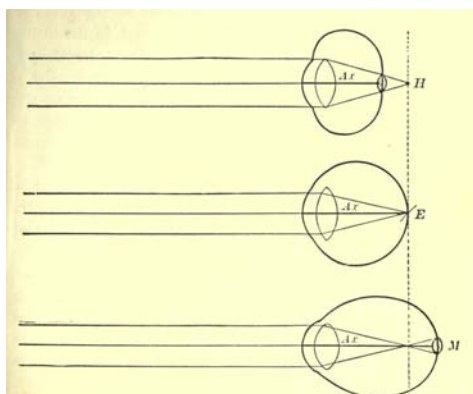


Fig. 4. Diagram of the Hypermetropic, Emmetropic and Myopic Eyeballs

H, hypermetropia; E, emmetropia; M, myopia; Ax, optic axis. Note that in hypermetropia and myopia the rays, instead of coming to a focus, form a round spot upon the retina.

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**This is a Bates Method Natural Eyesight Improvement book.  
Comments printed in blue are written by Clark night.  
[www.cleareyesight.info](http://www.cleareyesight.info) - ClearSight Publishing Co.**

STORIES FROM THE  
CLINIC

*By*  
EMILY C. LIERMAN

CENTRAL FIXATION PUBLISHING CO.  
NEW YORK CITY

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*Emily C. Lierman*

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## PREFACE

The articles comprising this book were first published in the monthly magazine "Better Eyesight" during a period of five years.

Various eye defects are described in simple and intelligible language, so that those who are interested may follow the practical instructions and improve their own vision, or that of others.

The stories are drawn from my clinical experience in the cure of imperfect sight by treatment without glasses. I have been Dr. Bates' assistant for eleven years, and they were years of a great education in the knowledge of the eye, in health, and in disease.

To Dr. W. H. Bates, the discoverer of the method, I am indebted for his encouragement and help.

EMILY C. LIERMAN.



PRESS OF THOS. B. BROOKS, INC  
NEW YORK

## INTRODUCTION

I feel honored in being asked to write an introduction to this excellent book, "Stories From the Clinic," by Emily C. Lierman.

The stories have come directly from Mrs. Lierman's experience, and consequently are of intrinsic value. The patients, their symptoms of imperfect sight, and the treatment are all described in language which is so clear that anyone can understand.

For more than nine years Mrs. Lierman was my assistant in the out-patient department of the Harlem Hospital. She showed a great deal of understanding in treating the patients, adapting my method to each individual case. The cures she obtained were of the greatest value. She was particularly interested in the school children, and was so kind and patient with them that they all loved her. Her cures of imperfect sight without glasses were numerous. The way she treated the patients and the results obtained were a contribution to the practice of ophthalmology. For example, an old lady with absolute glaucoma in one eye, totally blind with no perception of light, visited the clinic to obtain relief from an agony of pain. Many doctors had previously advised the removal of one or both eyes, which has been for many years considered by regular physicians to be good practice. It has also been taught that no operation or treatment can cure the blindness resulting from absolute glaucoma. Mrs. Lierman was told that it was a hopeless case, but was asked to try to relieve the pain. She immediately treated the woman, and much to my surprise not only relieved the pain, but also improved the eye until the patient became able to see at the distance, and to read fine print without glasses.

Of course, her work attracted attention and criticism. A prominent physician was sent one day to investigate. We told him the facts and a number of patients were treated for his benefit. He was very much interested in an elderly colored woman with cataract. This patient became able to read diamond type from six to fourteen inches from her eyes without glasses. The doctor, himself, was wearing glasses for distant vision and a stronger pair for reading. Mrs. Lierman treated him, also, with much benefit. From his personal experience and from his observation of the treatment of the patients by Mrs. Lierman, he was convinced that the method was one of great value. He had been sent to condemn, and remained to praise.

W. H. BATES, M.D.



## DEFINITIONS

**NORMAL VISION** is perfect sight at all distances.  
**The Snellen test card** is the standard for testing the vision. When the ten foot line of the card can be read at ten feet or further, and fine print can be read at six inches or less, one has normal vision.

**MYOPIA** or **NEAR-SIGHTEDNESS**: The vision for near objects is good, while the distant vision is imperfect.

**HYPERMETROPIA** or **FAR-SIGHTEDNESS**: The sight is not so good at a near point as it is for more distant objects.

**PRESBYOPIA** or **OLD AGE SIGHT**: The vision is imperfect when the patient tries to read fine print at a near point. The distant vision may or may not be good.

**ASTIGMATISM** is an imperfect curvature of the eye.  
Usually the front part of the eye has one curve which is different from all the other curves.

**CATARACT** is an opacity of the lens in the pupil, which interferes with good vision.

**RETINITIS PIGMENTOSA** is a disease of the interior of the eye, accompanied by the formation of black pigment spots.

**FLOATING SPECKS** are not real, they are imagined.

**IRITIS** is an inflammation of the iris, or the colored part of the eye.

**CHALAZION TUMOR** is a swelling of one of the glands of the eyelids.

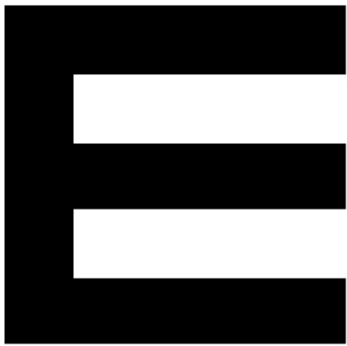
**MEMORY**, or **IMAGINATION**, is the ability to see or recall letters, or other objects, when the eyes are closed, as well as they can be seen with the eyes open.

The **SNELLEN TEST CARD** has letters or other objects printed in varying sizes. The smallest letter or picture seen clearly on the card is a measure of the vision.

**POT HOOKS** is the name used for test cards which have a letter "E" printed with the opening pointing up or down, in or out. The test letter is made of different sizes similar to other Snellen test cards. It is usually employed to test the vision of children or adults who do not know the alphabet. The smallest "E" which the patient recognizes "pointing" in the true direction, measures the amount of sight.

**DIAMOND TYPE** is one of the smallest types used in printing and helps to improve the vision if it is read every day.

# Pothooks, Tumbling, Inverted E Eyechart

1  20/200

2  20/100

3  20/70

4   
 20/50

5  20/30

6   
 20/20

7  20/15

8  20/10

## SUGGESTIONS

**1 - If the vision of the patient is improved under the care of the doctor, and the patient neglects to practice, when he leaves the office, what he is told to do at home, the treatment has been of no benefit whatever. The improved vision was only temporary. Faithful practice permanently improves the sight to normal.**

**2 - If the patient conscientiously practices the methods, as advised by the doctor, his vision always improves. This applies to patients with errors of refraction, as well as organic diseases.**

**3 - For cases of squint we find that the long swing is beneficial to adults and to children.**

**4 - When a patient suffers with cataract, palming is usually the best method of treatment, and should be practiced many times every day.**

**5 - All patients with imperfect sight unconsciously stare, and should be reminded by those who are near to them to blink often. To stare is to strain. Strain is the cause of imperfect sight.**

**The following rules will be found helpful if faithfully observed:—**

**6 - While sitting, do not look up without raising your chin. Always turn your head in the direction in which you look. Blink often.**

**7 - Do not make an effort to see things more clearly. If you let your eyes alone, things will clear up by themselves.**

**8 -Do not look at anything longer than a fraction of a second without shifting.**

**9 - While reading, do not think about your eyes, but let your mind and imagination rule.**

**10 - When you are conscious of your eyes while looking at objects at any time, it causes discomfort and lessens your vision.**

**11 - It is very important that you learn how to imagine stationary objects to be moving, without moving your head or your body.**

**12 - Palming is a help, and I suggest that you palm for a few minutes many times during the day, at least ten times. At night just before retiring, it is well to palm for half an hour or longer.**

## AIDS TO PERFECT SIGHT BY TREATMENT WITHOUT GLASSES

### Psalm 23 A Psalm of David



### S. Matthew 4 Beatitudes



### Psalm 110



### INSTRUCTIONS

Dr. W. H. Bates has made many remarkable discoveries relative to the prevention and cure of imperfect sight without the aid of glasses during his thirty-eight years of research and experimental work. Among the most important of these discoveries, and one that he has proved again and again, is the following:

**FINE PRINT IS A BENEFIT  
TO THE EYE—LARGE PRINT  
IS A MENACE.**

It is impossible to read microscopic or very fine print by making an effort to see it. It can only be read when the mind and eyes are relaxed.

The above chapters are written in diamond and microscopic type. At first it may seem difficult to become accustomed to the fine print, but by looking at

it without trying to read it, the print will become discernible.

Some people find it beneficial to imagine the white spaces between the lines, whiter than the margin. When one imagines the white spaces perfectly white, the print becomes very black and legible, apparently of its own volition.

Large print is detrimental to perfect sight because the eye tries to see the whole letter at once. When one is looking at an object, for instance, a chair, the object blurs if the whole is seen at once. You cannot possibly see the arms, legs, back and body of a chair all at once. You either see the back first or the seat. This is Central Fixation. Seeing best where you are looking.

We know that if these instructions are carefully followed, the above articles will prove extremely beneficial.

Copyright, 1923, by  
W. H. BATES, M.D.  
New York

## AIDS TO PERFECT SIGHT BY TREATMENT WITHOUT GLASSES

### INSTRUCTIONS

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## TEST CARD PRACTICE

- 1 - Every home should have a test card.**
- 2 - It is best to place the card permanently on the wall in a good light.**
- 3 - Each member of the family or household should read the card every day.**
- 4 - It takes only a minute to test the sight with the card. If you spend five minutes in the morning practicing, it will be a great help during the day.**
- 5 - Place yourself ten feet from the card and read as far as you can without effort or strain. Over each line of letters are small figures indicating the distance at which the normal eye can read them. Over the big C at the top of the card is the figure 200. The big C, therefore, should be read by the normal eye at a distance of two hundred feet. If you can read this line at ten feet, your vision would be 10/200. The numerator of the fraction is always the distance of the card from the eyes. The denominator always denotes the number of the line read. If you can only read the line marked 40 at ten feet, the vision is 10/40.**
- 6 - If you can only see to the fifth line, for example, notice that the last letter on that line is an R. Now close your eyes, cover them with the palms of the hands and remember the R. If you will remember that the left side is straight, the right side partly curved, and the bottom open, you will get a good mental picture of the R with your eyes closed. This mental picture will help you to see the letter directly underneath the R, which is a T.**
- 7 - Shifting is good to stop the stare. If you stare at the letter T, you will notice that all the letters on that line begin to blur. It is beneficial to close your eyes quickly after you see the T, open them, and shift to the first figure on that line, which is a 3. Then close your eyes and remember the 3. You will become able to read all the letters on that line by closing your eyes for each letter.**
- 8 - Keep a record of each test in order to note your progress from day to day.**
- 9 - When you become able to read the bottom line with each eye at ten feet, your vision is normal for the distance, 10/10.**
- 10 - The distance of the Snellen test card from the patient is a matter of considerable importance. However, some patients improve more rapidly when the card is placed fifteen or twenty feet away, while others fail to get any benefit with the card at this distance. In some cases the best results are obtained when the card is as close as one foot. Others with poor vision may not improve when the card is placed at ten feet or further, or at one foot or less, but do much better when the card is placed at a middle distance, at about eight feet. Some patients may not improve their vision at all at ten feet, but are able to improve their sight at twenty feet, or at one foot. While some patients are benefited by practicing with the card daily, always at the same distance, there are others who seem to be benefited when the distance of the card from the patient is changed daily.**

60 FEET

C

30 FEET

R B

20 FEET

T F P

16 FEET

5 C G O

10 FEET

4 K B E R

8 FEET

3 V Y F P T

4 FEET

2 Q C O G D B C

3 FEET

R Z 3 B 8 S H K F O

2 FEET

F T Y V P E C O B R K 5 6

# Fundamentals

By

W. H. Bates, M. D.

1. Glasses discarded permanently.

2. Central Fixation is seeing best where you are looking.

3. Favorable conditions: Light may be bright or dim. The distance of the print from the eyes, where seen best, also varies with people.

4. Shifting: With normal sight the eyes are moving all the time.

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

6. 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. Do not move the head or eyes or 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.

7. Drifting Swing: When practicing this swing, one pays no attention to the clearness of stationary objects, which appear to be moving. The eyes wander from point to point slowly, easily, or lazily, so that the stare or strain may be avoided.

8. 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.

9. Stationary Objects Moving: By moving the head and eyes a short distance from side to side, being sure to blink, one can imagine stationary objects to be moving.

10. Memory: Improving the memory of letters and other objects improves the vision for everything.

11. Imagination: We see only what we think we see, or what we imagine. We can only imagine what we remember.

12. Rest: All cases of imperfect sight are improved by closing the eyes and resting them.

13. Palming: The closed eyes may be covered with the palm of one or both hands.

14. Blinking: The normal eye blinks, or closes and opens very frequently.

15. Mental Pictures: As long as one is awake one has all kinds of memories of mental pictures. If these pictures are remembered easily, perfectly, the vision is benefited.



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

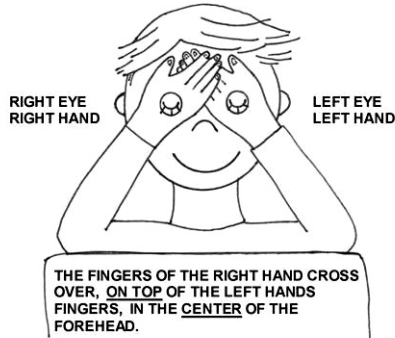
- 1 - Glasses discarded permanently.
  - 2 - Central fixation is seeing best where you are looking.
  - 3 - Favorable conditions: Light may be bright or dim. The distance of the print from the eyes, where seen best, also varies with people.
  - 4 - Shifting: With normal sight the eyes are moving all the time.
  - 5 - Swinging: When the eyes move slowly or rapidly from side to side, stationary objects appear to move in the opposite direction.
  - 6 - Long swing: Stand with the feet about one foot apart, turn the body to the right—at the same time lifting the left foot. Do not move the head or eyes or 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.
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  14. Blinking: The normal eye blinks, or closes or opens very frequently.
  - 15 - Mental pictures: As long as one is awake one has all kinds of memories of mental pictures. If these pictures are remembered easily, perfectly, the vision is benefited.
- #2 – Central fixation - Place the object the eyes are looking at in the center of the visual field.
- #5 and 9 – Oppositional movement.
- #6 – Long swing - The head, eyes do move with the body, in synchronization, at the same time, in the same direction.
- See diagrams, directions [www.cleareyesight.info](http://www.cleareyesight.info).
- #8 - This can also be done with the finger 6 inches in front of the face/nose, between the left and right eyes.
- #10, 11, 15 memory, imagination, remembering, imagining objects, mental pictures clear.
- #13 – Palming and other activities, correct eye functions listed above and in this book are described with diagrams on [www.cleareyesight.info](http://www.cleareyesight.info)
- Free eye charts are available for download in Microsoft word and Adobe Reader.
- Use the navigation bar as a chapter/contents index.

## PALMING

## THE LONG SWING

### PALMING

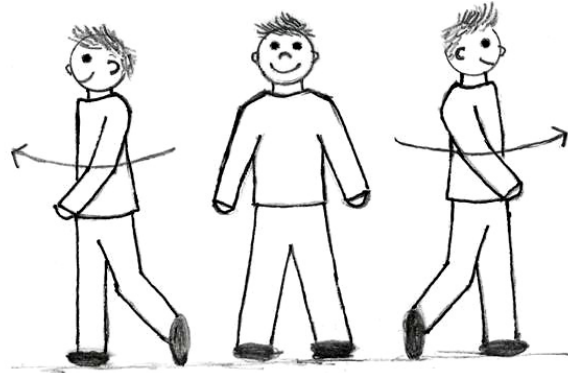
TO COVER THE CLOSED EYES WITH THE PALMS OF THE HANDS WHILE RELAXING AND THINKING SOMETHING PLEASANT.



THIS PICTURE SHOWS THE LEFT AND RIGHT HANDS/EYES OF A PERSON FACING THE READER. TO SEE HOW THE READERS HANDS ARE PLACED; VIEW THIS PICTURE IN A MIRROR OR PLACE THE PICTURE OUTWARD ON THE CHEST AND LOOK DOWN AT THE PICTURE FOR A SECOND.

PALMING RELAXES THE MIND, BODY, NECK, EYE MUSCLES, EYES, AND WHEN COMBINED WITH SUNNING IMPROVES THE EYES/RETINA, BRAIN AND BODY'S ACTIVATION/REACTION TO SUNLIGHT AND ABSORPTION, USE OF SUNLIGHT. THIS IMPROVES FUNCTION, HEALTH OF EYES, BRAIN, BODY.

### THE LONG SWING



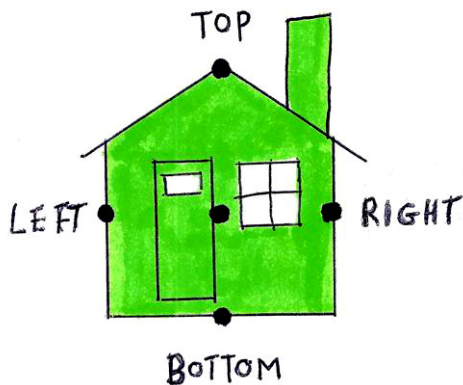
TURN AND SWING RIGHT

CENTER

TURN AND SWING LEFT.

**SHIFTING – EYE MOVEMENT – THE EYES/VISUAL ATTENTION/CENTER OF THE VISUAL FIELD SHIFT/MOVE FROM POINT TO POINT, PART TO PART ON A OBJECT AND FROM OBJECT TO OBJECT.**

### SHIFT ON THE HOUSE, DOT TO DOT.

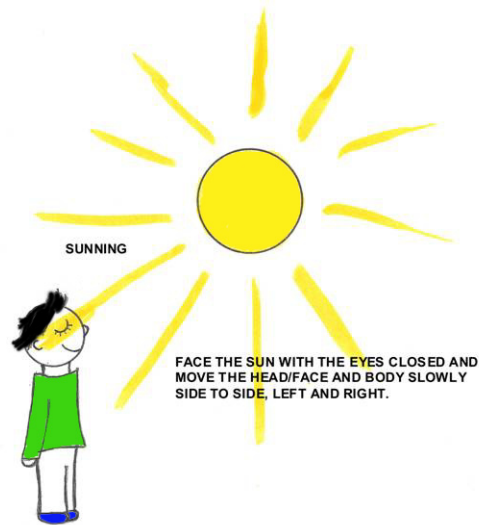


### SHIFT IN ANY DIRECTION/PATTERN.



THE DIAGRAM ABOVE SHOWS A EXAMPLE OF THE NATURAL SHIFTING PATTERN OF THE EYES.. NOTICE THE EYES MOVE FREELY ON THE HOUSE IN A VARIETY OF PATTERNS, DIRECTIONS.

**BIRD IS SEEN CLEAR BY PLACING IT IN THE CENTER OF THE VISUAL FIELD**



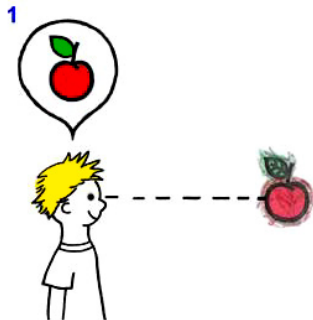
**FACE THE SUN WITH THE EYES CLOSED AND MOVE THE HEAD/FACE AND BODY SLOWLY SIDE TO SIDE, LEFT AND RIGHT.**

**When looking at the bird;**  
**Place it in the center of the visual field.**  
**Shift part to part on the bird, moving the exact center of the visual field part to part.**  
**Do this for any object the eyes look at; shift part to part on the object. Blink, relax.**  
**Move the head/face, body with the eyes, in the same direction.**  
**The center of the visual field moves with the eyes from object to object, part to part.**  
**Use perfect, exact central fixation; shift small point to small point on objects and small parts of objects.**

**MEMORY AND IMAGINATION – CLEAR MENTAL PICTURES**

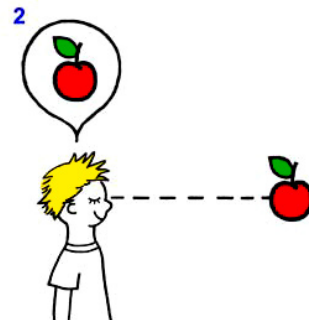
**REMEMBERING, IMAGINING OBJECTS CLEAR IMPROVES FUNCTION OF THE BRAIN WITH THE EYES AND CLARITY OF VISION.**

**EYES OPEN  
 APPLE SEEN UNCLEAR.  
 APPLE IN MIND,  
 IMAGINATION IS CLEAR.**



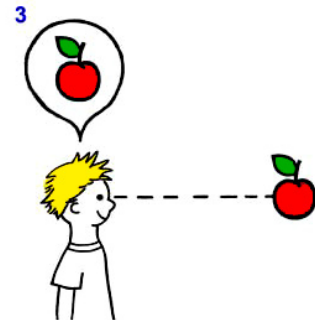
**REMEMBER, IMAGINE THE APPLE CLEAR.  
 SHIFT FROM PART TO PART ON THE UNCLEAR APPLE AND REMEMBER, IMAGINE THE APPLE CLEAR.**

**EYES CLOSED  
 APPLE IN MIND,  
 IMAGINATION IS CLEAR.**



**SHIFT FROM PART TO PART ON THE APPLE IN THE MIND, IMAGINATION AND REMEMBER, IMAGINE THE APPLE CLEAR.**

**EYES OPEN  
 APPLE IS SEEN CLEAR  
 APPLE IN MIND,  
 IMAGINATION IS CLEAR.**



**SHIFT FROM PART TO PART ON THE APPLE AND REMEMBER, IMAGINE AND SEE THE APPLE CLEAR.  
 REPEAT STEPS # 1,2,3.**

**USE THE IMAGINARY NOSEFEATHER WITH STEPS # 1,2,3. (SEE NOSEFEATHER, CHAPTER --)**  
**REMEMBER, IMAGINE, SEE THE APPLE CLEAR WITH THE EYES OPEN, CLOSED, OPEN WHILE SHIFTING FROM PART TO PART ON THE APPLE WITH THE NOSEFEATHER. TRACE AROUND THE EDGES OF THE APPLE, STEM, LEAF WITH THE END OF THE FEATHER. TRACE SMALL PARTS OF THE APPLE.**  
**PRACTICE STEPS # 1,2,3 WITH BOTH EYES TOGETHER, THEN ONE EYE AT A TIME, THEN BOTH TOGETHER AGAIN.**  
**PRACTICE ON ANY SIZE OBJECT; LARGE, MEDIUM, SMALL, TINY AT CLOSE, MIDDLE, FAR DISTANCES.**

**Remembering, imagining any pleasant object, scene, happy memory, fantasy relaxes the mind, body, eye muscles, eyes resulting in clear vision.**  
**Remembering, imagining the objects, scene clear while relaxed, easy, without effort improves the clarity of vision.**  
**If the boy remembers, imagines a different object, any happy memory, image, scene (playing baseball, a favorite adventure...) with the eyes open looking at the apple, shifting on it and when the eyes are closed shifting on the imaginary image: when the eyes are opened - the apple will be seen clear. He can remember, imagine the apple or any pleasant object clear, shift on it in his mind and the apple will be seen clear.**  
**Palming with the eyes closed combined with the memory imagination activity brings clear vision.**

## **SUN TREATMENT**

Most ophthalmologists prescribe dark glasses to nearly all of their patients who suffer from the brightness of light. This practice, in my opinion, has been overdone. I remember one patient who was in the hospital for two years in a dark room, with both eyes bandaged with a dark binding day and night continuously. When she left the hospital she was in a very pitiable condition. She was practically blind in the bright sunlight. She went to a great many clinics and eye doctors and all they did for her was to give her stronger dark glasses. In time these dark glasses did not give her any relief. Instead of being helpful to her weak eyes, the glasses had the effect of making them more sensitive to the light than they had ever been before. It has been my experience that all persons who wear dark glasses sooner or later develop very serious inflammation of their eyes. The human eye needs the light in order to maintain its efficiency. The use of eye-shades and protections of all kinds from the light is very injurious to the eyes.

Sunlight is as necessary to normal eye as is rest and relaxation. If it is possible, start the day by exposing the eyes to the sun—just a few minutes at a time will help. Get accustomed to the strong light of the sun by letting it shine on your closed eyelids. Later, when you can look down sufficiently, by gently lifting the upper lid the white part of the eye can be exposed, while the sun's rays strike directly on it. It is good to move the head slightly from side to side while doing this, in order to prevent straining. One cannot get too much sun treatment.

## **STORIES FROM THE CLINIC**

### **CHAPTER I**

#### **EXPERIENCES WITH SCHOOL CHILDREN**

##### **TOPSY**

THE patients who come to our clinic do wonderful things, especially the school children. We can give each one of them, as a rule, only about five minutes of our time, and yet they are able to carry out their instructions at home, and to get results. This is a great tribute to their patience and intelligence.

Most of the children and adults are helped by palming, and remarkable cures have been obtained by this means alone. A little lad had been so injured in an automobile accident that he had only light perception in his left eye. It was some time before I could get him to palm regularly, but as soon as he became willing to do so many times a day, his sight began to improve rapidly, and he is now completely cured.

There are some patients, however, who cannot or will not palm. One of these was a little colored girl, with corkscrew curls, looking for all the world like Topsy of "Uncle Tom's Cabin." She had been sent to the clinic because she could not see the writing on the blackboard, and the school nurse told me later that she was unruly, and a great trial to her teacher. She was something of a trial to me, too, at first, for I could not get her to palm for a moment, and did not know what to do with her. Then I discovered that she had an excellent memory when she chose to use it, and I resolved to treat her with its aid. I was able to improve her sight considerably.

Soon her teacher noticed such a notable change in her deportment, that on the next clinic day the school nurse came with her, to see what had been done for the child. Then I asked the girl to remember, with closed eyes, a letter on the test card as gray instead of black. This effort produced such a strain that she could not stand still a minute, and when she opened her eyes there was no improvement in her vision. Then I asked her to remember the blue beads she had around her neck. She did so for a few minutes with eyes closed, standing perfectly still all the time, and when she opened her eyes she read another line of letters on the test card. Again she closed her eyes and remembered the blue beads perfectly. In a short time, by alternating the perfect memory of the blue beads, with her eyes closed and open, her vision soon improved to 10/10.

The nurse was impressed by this demonstration, which proved to her that perfect memory improves the sight and relieves nervousness. She returned another day and brought a child that she herself was unable to benefit. Sometime later she informed me that Topsy was cured, and busy every day at recess teaching the girls of her classroom how to rest their eyes, and testing their eyes with a test card I had given her. The janitor of the school hid it away every day for her, until she was ready to play the game

of curing eyes. With Topsy's help the janitor now gets along well without his glasses. I wish we had more like Topsy.

### THREE SIMILAR CASES

George, Gladys and Charlie are three children who came for treatment at about the same time. They were of the same age, nine years, and all were suffering from headaches and had about the same degree of defective sight. They entered a very interesting three-cornered contest, in which each one tried to beat the others at getting cured. George and Gladys were colored and Charlie was a white boy of a most pronounced blonde type, with fair curls and blue eyes.

George was the first of the trio to visit us. He had been sent from his school to get glasses because of his headaches, and it was easy to see from his half-shut eyes and the expression of his face that he was in continual misery. My first impulse was to try to make him smile, but my efforts in that direction did not meet with much success.

"Won't you let me help you?" I asked.

"Maybe you can and maybe you can't," was his discouraging reply.

"But you are going to let me try, aren't you?" I persisted, stroking his wooly head.

He refused to unbend, but did consent to let me test his vision which I found to be 20/70 with both eyes, I showed him how to palm and rest his eyes. He continued to come to the clinic, but for three weeks I never saw him smile, and he complained constantly of the pain in his head.

Then there was Gladys, accompanied by her mother who gave me a history of her case very similar to that of George. Her vision was 20/200 and in a very short time I improved it to 20/40. At her next visit it became temporarily normal, and this fact made a great impression upon George. I saw him roll his black eyes and watch Gladys while I was treating her, and later, when he thought I was not looking, I saw him walk over to her and heard him say:

"You ain't going to get ahead of me. I came before you. I wanna get cured first. See?"

I separated the two children quickly, for I foresaw trouble; but all the time I was grateful to Gladys for having, however unintentionally, stirred George up.

Next week Charlie came. He looked very sad, and his mother who came with him was sad also. His headaches were worse than those of the other children and were actually preventing him from making progress in school. Promotion time was near, and both mother and child were anxious for fear the latter would be left behind. They hoped that by the aid of glasses this misfortune would be averted. Of course I explained to the mother that we never gave glasses at this clinic, but cured people so they did not need them. I tested Charlie's sight, and found it to be 20/100. I told him to close his eyes and remember a letter perfectly black, just as he saw it on the test card. He shook his head in dismay and said:

"I can't remember anything, the pain is so bad."

"Close your eyes for part of a minute," I said, "open them just a second and look at the letter I am pointing at, then quickly close them again. Do this for a few minutes, and see what happens."

What happened was that in a few minutes Charlie began to smile and said:

"The pain is gone." Alternately opening and closing the eyes helped him to relax and relieved the terrible eyestrain which caused his trouble.

I showed him how to palm, and left him for a while. When I came back his sight had improved to 20/70. I was very happy about this, and so was Charlie's mother, who was pleased to learn that he did not have to wear glasses.

Charlie continued to come regularly and became an unusual patient. One day he told me that he had been out sleigh-riding with the boys, and that the sun had been shining so brightly upon the snow that he couldn't open his eyes, and his head ached so that he had to go home and go to bed.

"Why didn't you palm for a while and remember one of those letters on the card?" I asked.

"That's right," he said, "I wonder why I didn't think of it."

The next time he came there had been another snowstorm, and he could hardly wait to tell me what had happened.

"I went sleigh-riding some more with the boys," he said, as soon as he could get my ear, "and the pain came back while I was having fun. But this time I didn't go home and go to bed. I remembered what you said, covered my eyes with the palms of my hands right in the street, and in a little while the pain all went away. I could look right at the snow with the sun shining on it, and I didn't mind it a bit."

From the start, the two colored children were greatly interested in Charlie, and thinking that a little more of the competition that had proved so effective in George's case would do no harm, I said, "See who beats." But they needed no urging on my part. Every clinic day, an hour before the appointed time, the black and white trio was at the hospital door. If a crowd was present the children forced their way through without much ceremony, and then started on a dead run for the eye room. There they practiced diligently until Dr. Bates and I arrived, and I fear they also squabbled considerably. There was no lack of smiles now, and as for George, he wore a grin on his face all the time.

Charlie was the first to be cured. In just a month from the time of his first visit his vision had improved to 20/10. Usually patients do not come back after they are cured, but this boy kept on with the practice at home and returned to show me, and incidentally his two rivals, what progress he had made. We had a visiting physician at the clinic that day, and I rather suspected Charlie of trying to show off, when he walked to the very end of the room, a distance of thirty feet from the card. To my astonishment and the great annoyance of George and Gladys, he read all the letters on the bottom line correctly. The colored children made haste to suggest that he had probably memorized the letters; so I hung up a card with pot hooks on it, such as we use for the illiterate patients, and asked him to tell me the direction in which those of the bottom line were turned. He did not make a single mistake. There seemed no room for doubt that his vision had actually improved to 30/10, three times the accepted standard of normal vision. Not more than one other patient at the clinic has ever been able to read the card at this distance. Charlie returned several times after this, not from the best of motives, I fear, and I took great pleasure in exhibiting his powers to the nurses and to visitors.

George and Gladys were cured very soon after Charlie, both of them becoming able to read 20/10. I was sorry that they could not have done as well as Charlie, but since their vision is now twice what is ordinarily considered normal, I think they ought to be satisfied.

It is about two years since George, my pickaninny boy, was pronounced cured, but he comes to see me now and then, just the same. About six months after he obtained normal sight, I noticed him standing in a far corner of the room apparently trying to hide. When I approached him finally and asked him if he were suffering again with his eyes, he answered:

"No ma'am, my eyes are all right, but I want to come and see you."

I said, "Oh, you just want me to love you a little bit, don't you?"

George looked very shy and rolled his big eyes as only a darky can, edging up to me until his kinky head rested on my arm,—just a little pickaninny boy hungry for love.

### JOEY AND PATSY

An Italian boy named Joey, nine years old, was struck on the head in an automobile accident and injured in such a way that he became almost totally blind in the left eye. From Joey's brother Patsy it was learned that when the accident occurred Joey was at the head of his troops, conducting a well ordered retreat after a fierce conflict in which he had been obliged to yield to greater numbers. His face was to the foe and the automobile was behind him, yet Joey did not know that an automobile had struck him. He thought that more enemies were attacking him from the rear. Later when he found himself lying on a hospital cot and realized that he was hurt, his first remark was, "Let me at the guys who soaked me from the back."

Patsy told me later what an awful time he had convincing Joey that an automobile and not his enemies, had struck him. What a punishment it must have been to Joey to lie there on his cot! To suffer pain was bad enough, but more painful to him was the knowledge that his gang was without a leader.

A week later he was brought to the hospital clinic by his aunt. Dr. Bates examined him and found that he was suffering from an injury to the optic nerve of the left eye, as a result of which the vision in this eye had been reduced to mere light perception.

The child was then brought to me for treatment, and never have I seen a more forlorn little specimen of humanity. I did not know then that a gang of street boys had once looked up at him as their leader, and I never should have suspected it. There was not the shadow of a smile upon his face, and he had not a word to say. Both his face and his clothes were dirty. The latter were also ragged, while his shoes were full of holes. His teeth were wonderful, however, and beneath the grime on his small countenance one could catch glimpses of the complexion of perfect health, I told him to rest his eyes by closing and covering them with the palms of his hands, and after a few minutes he was able to see the largest letter on the test card with his blind eye at five feet. The vision of the right eye was normal. I told him to rest

his eyes by closing them six times a day for five minutes at a time, and to come back on the next clinic day.

The next time I saw him not only had he made no progress, but he was as blind as he had been at the beginning. His aunt said: "You scold him. Tell him you will keep him here, because he will not palm or do anything he is told to do at home."

I answered, "You do not wish me to lie to him, do you?"

Joey, so sad and worried, looked up into my face, waiting for me to defend him again, as his aunt replied: "Well, I will leave him here and not take him home again."

"All right," I said. "I live in the country, and perhaps Joey would like to go home with me and play in the fields and watch the birds build their nests. Maybe he will learn how to smile then as boys should."

It was good to see his dirty little face flush up with excitement and pleasure. I really meant what I said, but Joey did not give me a chance to take him to my home, because he did not come back after his eyes were cured. However, when I noticed that he began to take a little interest in what I was trying to do for him, I said, "Joey, you are going to love me a whole lot, because I love you already, but you must mind what I say, because if you don't you will go blind."

Joey consented to palm for a few minutes, and his sight improved so that he was able to see the large letter of the test card three feet away. He now made an effort to see the next line of letters but not only did he fail to do so, but he also lost the large letter. The strain had made him blind again.

How I wished I had more time to spend with him. But the room was full of patients, and more were coming continually. I had to attend to them. So I asked Joey, very gently, to palm and not take his hands from his eyes until I came back to him. After ten minutes or so I returned and asked what he could see. To my surprise he read five lines of the test card with the blind eye. Much encouraged I sent him home and he promised to palm six times a day. He stayed away almost a week and I worried about him, for I knew he would forget what I had told him to do. Then one day he returned with his brother Patsy. My, how Patsy did talk! Joey had not a word to say, and did not smile until I asked him. Patsy said that Joey did not practice, and that his father hit him on the head and threatened him with all sorts of things to make him do so. It was quite evident that he had not practiced. When I asked him to read the card, all he could see was the big letter at the top at three feet.

Poor little Joey! I gathered him in my arms, patted his dirty face and told him that if he would count six fingers for me and practice palming as many times every day, I was sure Santa Claus would have some toys for him at Christmas time. Joey was all smiles, and stood with his eyes covered for a long time. When he again looked at the card he read the fifth line, which is called the forty line letters. In the meantime Patsy was telling me all about the rest of his family. His big brother was going to be married, he said, but not until another brother, eighteen years old, was out of prison. Patsy talked like a man and his voice sounded like a foghorn; but I saw that he had a gentle nature, and I enlisted him as my assistant for Joey. I asked him if he would not try to get Joey to palm more, and told him that he must always speak kindly to him. The father was warned not to hit Joey on the head again, because that made the hemorrhages worse and Joey would go blind. Bless Patsy's heart! He promised to help me all he could, and I am sure he deserves much of the credit for what I was afterward able to do for his brother.

Thereafter, Joey's progress was steady. He responded to kindness as a flower responds to the sun. But if I ever forgot myself and spoke to him without the utmost gentleness, if I even raised my voice a little, he would at once become nervous and begin to strain. One day I remonstrated with him because he had not done what I had told him, and a few moments later when he read the test card with his left eye, he said, "I can only see the large letter." I explained how important it was for him to see with both eyes, because he might be a great man some day. He smiled and palmed, and in a short time he again read five lines of the card.

At a later visit he was very conspicuous because he had had his face washed. I could see that he wanted me to notice this, as of course I did, giving him high praise for his improved appearance. He smiled and started to palm without being told, and his sight improved more rapidly than at any previous time.

His last visit was a happy one. He saw all of the bottom line at ten feet without palming. Dr. Bates then examined his eyes with the ophthalmoscope and found that the retina had cleared up, and that there were no more hemorrhages. The optic nerve had become normal.

One day Patsy appeared at the clinic wearing spectacles.

"Patsy, for heaven's sake, what are you wearing those things for?" I inquired.

"The nurse in school said I needed glasses and my father paid four dollars for them—but I can see without them."

His vision without glasses was 20/200. After resting his eyes by palming five minutes, his sight improved considerably.

"Do you want to be cured without glasses?" he was asked.

"Sure, I don't want to wear them."

"Well, you ask father's permission and I will cure you."

Fortunately, father had no objection, and now Patsy sees much better without glasses than he ever did with them. He says that the blackboard looks blacker than it used to, and that his lessons do not seem so hard.

Patsy continued to come with Joey for treatment until both were cured.

Christmas time was near at hand and when the day arrived for our Christmas party, the boys appeared at the clinic two hours ahead of time, to be sure that they would not be disappointed. Never did I see two kiddies happier or more grateful than they were, as they marched out of the room with their gifts and candies.

### HYMAN

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

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

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

Later I told his mother that I was sure I could help not only his eye trouble, but also the nervous twitching of his head. She did not seem to understand me, and appeared to doubt my ability to do anything for him. She had been told by a doctor that perhaps some day he would outgrow his nervousness. The boy himself seemed to be equally skeptical, but was, nevertheless, much interested. He was evidently curious to know what I would do for him, and quite willing to let me entertain him.

I tested his sight with his glasses on, and found that he was able to read only 10/50, all the rest of the card being a blur. I took the glasses off, and noticed that he stared less without them. With his glasses on, his face looked hideous and wrinkled like that of an old man. When Dr. Bates examined the glasses, he said it was quite evident that they caused the St. Vitus' Dance. Straining to see through lenses that were not suited to him, produced this nervous condition.

I told the boy to cover his eyes with the palms of his hands so as to exclude all the light and to remember one of the letters of the test card perfectly black. He seemed to think this was a game of hide and seek, and kept continually looking through his fingers. My patience was tried considerably, but I did not let him know it. Instead I told him that I was especially fond of little boys, and wished to help him. He squared his shoulders and made an effort to keep his head still, but failed. Finally I succeeded in making him understand that if he wanted to stop the twitching of his head, he must keep his hands over his eyes until I told him to remove them. He became as serious as I was myself, and though I watched him while I was treating other cases, I did not once see him uncover his eyes, or peep through his fingers. No doubt the fifteen minutes that he spent in this way seemed like hours to him. When I was able to return to him I said very gently:

"Now take your hands from your eyes, look at me, and be sure to blink often to stop your staring."

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



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

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

Hyman was anxious to be cured before vacation began, and was quite willing to do as he was told. He and his mother practiced reading their test card every day for an hour at a time. During the summer they came quite regularly and the mother was cured of her eyestrain and headaches. Hyman looked like a very different boy, and in the fall when school began he was apparently cured because the twitching had ceased, and his vision had improved to 10/10.

### **BETTY AND JOHN**

Betty, aged 13 years, usually found a convenient corner of our room where she could watch the patients having their eyes treated. She had no trouble with her eyes, but always came with her school chum who was under treatment. She listened attentively as I encouraged the patients, but was never troublesome nor did she ask any questions at any time. Somehow, she obtained a Snellen test card and helped some of her playmates recover their vision. She brought several of them to me to make sure that they could get along without their glasses.

One of the children was a boy, twelve years old, named John, who had worn glasses for five years and was very near-sighted. The school doctor had ordered glasses for him at the age of seven. Dr. Bates examined them and discovered that the boy was wearing far-sighted glasses for myopia, or near-sight. When they were changed the year before, the optician who sold them had made a terrible error. No wonder Johnnie was willing to have Betty help him! She told me that he could only see the fifty line of the card ten feet away without his glasses. When I tested Johnnie he placed himself fifteen feet away from the card and read every line of letters without a mistake. He told me how Betty spent an hour with him almost every day for three weeks, until he became able to read the card at any distance Betty desired him to read it. I am sorry she stopped coming to the clinic. Her parents moved away, and I lost a very good assistant.

### **MARJORIE AND KATHERINE**

#### **MARJORIE**

Then a mother came to the clinic with her two little girls. Marjorie, the older, had been to us some years previously and was cured. The younger child was sent home by the school nurse and told to see a doctor about her eyes. Dr. Bates told the mother to wait for me, that I would test the children's eyes. The mother kept looking at me, smiling all the while. She asked: "Don't you remember me? Don't you remember my little girl? I brought her to you and Dr. Bates six years ago. She had alternate squint when she was three years old, and Dr. Bates cured her without an operation."

Hundreds of cases had been treated and cured in that time, and this dear little girl had grown from a wee tot of three years to a big girl of nine. The mother waited patiently for me to say yes. I tried my best to remember, for my memory is usually good, but I failed this time. Before I knew it I answered, "Yes, surely I remember." How grateful this mother was because I did not forget her child, and how sorry I was because I told a fib. She just knew that I would not forget, so I could not convince her that I did. If Dr. Bates had had his retinoscope handy, he would have found that I was made near-sighted by telling the fib. When one tells an untruth, the retinoscope always reveals the fact.

Marjorie's eyes were as straight as mine, but everyone in the clinic who would listen to the mother that day, heard how we had cured her child of cross eyes.

## KATHERINE

Her Sister Katherine, aged seven years, stood by, wondering what we were going to do with her. Both girls were dressed with the greatest of care, and Katherine looked very much like a big French doll with her head just covered with curls. Dr. Bates examined her and said she had myopia, but not a bad case. I placed her ten feet from the test card and she read every letter correctly down to the forty line. As I walked over to where the card was placed to assist my little patient, the mother got ahead of me, and in a soft tone of voice, encouraged Katherine to palm and remember the last letter of the forty line of the card. Katherine did so, but she had only covered her eyes for a minute when she removed her hands and opened her eyes to read again. I wanted to tell the child that she had not palmed long enough, but before I could say a word, she began to read the next line of letters as her mother pointed to each one. After each letter was read, her mother very gently told her to blink and that would help her to see the next letter without a strain.

When Katherine had finished reading all of the thirty line without a mistake, the mother did not stop, but kept right on to the next line, pointing to one letter and then another until she read all of the twenty line.

Then the mother advised Katherine to swing her body from side to side, and to notice that everything in the room seemed to move in the opposite direction. While her mother was advising her what to do, the child did the best she could to read the card. The mother smiled when she saw how amazed I was to see her improve Katherine's eyes without my help. I asked: "Where did you learn how to do it?" She answered: "From reading your articles in the 'Better Eyesight Magazine.' I have been a subscriber for a number of years."

Some months later I saw them again. Katherine's vision was 10/10 in each eye. It is interesting to report that the child was cured entirely by her mother.

## STARING

Staring is one of the greatest evils. Children demonstrate this repeatedly.

A little Jewish girl had been coming to us for a year. On her first visit, she told us that the school nurse insisted that her eyes should be examined for glasses. Her mother was with her and begged me not to put them on the child, as she had a great dislike for them. She also believed that glasses could not possibly cure her. I was glad that I did not have to spend time convincing the mother that her little girl would not need them.

I tested the child's sight with the card and found that she had 20/70 with the right eye and 20/100 with the left. The girl stared constantly while she read the letters and I drew her mother's attention to this fact. I instructed the child to look away in another direction after she had read one or two letters of a line; she then improved her sight with both eyes to 20/50. Her mother was a valuable help to me in supervising the child's practice at home. No matter what the child was doing, or whenever she read a book or studied her lessons, the mother told her not to stare.

The directions for treatment at home and in school were simple. For instance, when she was asked to read something on the blackboard, she was not to look at the whole of a word or a sentence at one time. She was to look at the first letter of a word and blink her eyes. It would then clear up, and she could see the whole word without staring. In order to read a sentence without staring, she was to look at the first letter of the first word and then look at the last letter of the last word of the sentence, and to blink her eyes frequently while doing this.

How proud I was when she was promoted into a higher class without the aid of glasses! She was very grateful for what we had accomplished. Her school teacher, who had a very high degree of myopia, was so impressed by her marked improvement that she also became a patient of Dr. Bates, and is now enjoying good sight without glasses. Proof of her cure may be seen in the wonderful needle work which she is able to do.

## MEMORY

A school nurse brought us a child who was causing her teacher a great deal of worry because she could not remember anything. It was thought that glasses might help her. She was very nervous, and her face plainly showed a strain. At ten feet the letters on the bottom line of the test card were only black spots to her. This little child did not like to palm, so I asked her to look at a letter on the bottom line, which was a C, and with her eyes closed imagine it had a straight top. She said she could better imagine that it curved. Then she found she could imagine two other sides, one curved and one open, and when she opened her eyes she saw the letter C distinctly. I also noticed that she had stopped frowning.

By the same method, she became able to read all the other letters on the bottom line, demonstrating that her imperfect memory had been due to eyestrain. She had unconsciously seen the letters, but the eyestrain had suppressed the memory of them. With her eyes closed the strain disappeared, and she became able to remember, or imagine the letters.

It should be emphasized that palming regularly is a great help not only to the sight, but also to the mind. What a pity it is that all school nurses do not know what can really be accomplished in a few minutes each day, for the relief of eyestrain in school children. Teachers are always grateful when their pupils are cured of eyestrain, for after the children are cured, it is much easier to teach them.

### WHAT MEMORY DID FOR JENNIE

Jennie's mother was informed that her daughter needed glasses. I told the mother that Dr. Bates did not fit glasses at the clinic, and in order to get them she would have to come another day and see another doctor. The mother could not speak very good English. Her first question was: "I get der glasses fer nottink, yes?"

"No," I replied, "I am sorry to say, you must pay for them."

She started to leave the room, when I called her back and tested Jennie's sight. I felt sorry for the little girl, because she was very pretty, except for her eyes, which were partly closed most of the time.

"I don't like to wear glasses," she said. "I wore them for two weeks and then I broke them. Please help me so that I won't have to wear them again."

The mother seemed bewildered at first, and then she said, in a burst of confidence:

"You know, nurse, if der glasses was fer nottink, I should vorry. But all der time money, money for glasses, when all der time she breaks dem."

I told the poor mother not to worry, because her child could be cured and that she would not need glasses, if she would do what I told her.

"Sure, sure," she replied. "Det's all right, lady. You fix my Jennie's eyes, yes? Ven ve don't buy glasses ve got more money to buy someding for der stomach, yes?"

An Irish woman was standing by, and she roared with laughter. To keep peace in the room I had to use some tact and I thought it best to usher the Irish woman outside until I had treated the little girl, who turned out to be a very interesting patient. Jennie had never seen a test card before, and after palming was able to read the thirty line at fifteen feet. Below this, the card was a blank to her. I told her to follow my finger, while, with a rapid movement, I pointed to the large letter at the top of the card and so on down to the ten line. I directed her to palm, and pointing to the last letter on the ten line, which was an F, and quite small, I asked her if she could imagine some letter her teacher had written on the blackboard that day. She replied:

"Yes, I can imagine I see the letter O, a white O."

"Keep your eyes closed," I said, "and imagine that the letter I am pointing at has a curved top. Can you still imagine the O?"

"No," she said, "I can't imagine anything now."

"Can you imagine it is open, or straight at the top?" I asked.

She became excited and said: "If I imagine it has a straight top, I can still remember the white O."

"Fine," I said. "Can you imagine it has a straight line at the bottom?"

"No, if I do that I lose the O. I can imagine it's open much better."

"Good," I said. "It is open. Now imagine the left side open or straight."

She replied: "I can imagine it is straight. I think it is an F."

And when she opened her eyes she saw it plainly. The fact was that, although she had been unable

to see this letter consciously, she had unconsciously seen it for a fraction of a second, and could not imagine it to be other than it was, without a strain that caused her to lose control of her memory. And when she imagined it correctly she relaxed so that when she opened her eyes, she was able to see it. Jennie continued to come for treatment until she was cured. A month later her vision became normal and she had no more trouble. It would be very wonderful if all patients had as good an imagination. In that event the cure of imperfect sight would be much quicker.

### **ALICE**

For a long time Alice, aged nine, had been complaining of headaches. She did not like to wear glasses, and her mother was also opposed to them. Her vision with each eye separately was 10/20. I told her that she could be cured easily, and directed her to palm for a little while. She began to weep, and then I asked her a few questions. I learned that she stood in fear of her teacher, but I soon realized that her fears were unfounded. She said: "In the mornings, before school, I feel perfectly well. After playing in the street with the other children, I also feel well, but when I go into the class-room and start to study, my head begins to ache. It also aches when I am doing homework, but not so badly."

Again I asked her to read the test card at ten feet, and unconsciously I raised my voice a little. Immediately I saw her start as though some one had scared the very life out of her. I guessed at once just what was the matter, and lowering my voice, I told her as gently as possible that there was nothing to be frightened about.

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

She was encouraged to palm, and I left her for a time by herself. Coming back in a few minutes, I told her to remove her hands from her eyes, and tell me what she could read. I made my voice as low as I could, not much above a whisper. I placed her fifteen feet from the card this time, and she read all the letters without a mistake. Her vision was more than normal, and she said that her pain was gone. She came to the clinic several times after that to report that her headaches did not come back. She had practiced palming her eyes many times a day and remembered to blink all the time she was awake.

Alice confided to me that an unruly scholar in her class disliked her teacher, and influenced Alice in the same way. I asked her if she could tell the number of scholars in her class-room.

"Yes, about sixty," she replied.

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

This had a good effect on Alice. The next time she came, her attitude toward her teacher seemed to have changed completely. At every subsequent visit she always had something nice to say about her wonderful teacher.

### **JIM AND OTHERS**

While the work with the children is always interesting, we sometimes have a case so remarkable that it stands out from all the others.

Jim had imperfect sight and constant pain in the back of his eyes. He did not like to raise his head, because the light bothered him so much. Having tested his sight, which was 15/70, I placed him in a chair and told him not to open his eyes, even for a moment. After I had attended to a few more patients, I came back and asked him to open his eyes. What happened seemed like a miracle. He didn't look like the same boy. His formerly half-shut eyes were wide open, and without any trouble he read the bottom line of the test card at fifteen feet. When I praised him for what he had done, he smiled and asked, "When shall I come again?" I gave him the sun treatment, and told him to sit in the sun with his eyes closed whenever he found time.

At the next visit he read 20/10 with both eyes, and he told me that the light did not trouble him any more.

Later Jim brought a friend aged twelve, who had been wearing glasses for two years or more. When he came into the room he did not wait for his turn, in his eagerness, but placed himself right in front of me, took off his glasses, and said, "You cured Jimmie's eyes. Will you cure me too?"

"Surely," I said, "If you wait your turn." As soon as I could I tested his sight and found that he could see just as well without his glasses as with them—15/20. I told him to palm, and before he left the clinic that day, he saw distinctly some of the letters on the bottom line at fifteen feet. This was even more

remarkable than Jimmie's case, for patients who have worn glasses are usually much harder to cure than those who have never worn them.

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

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

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

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

### **KINDERGARTEN CHILDREN BENEFITED**

A kindergarten teacher requested me to help one of her little charges who was afflicted with squint. She informed me that the little one was very poor, so I advised the teacher to bring her to my clinic.

To become more acquainted with me, and the way in which cases were managed there, this teacher, at my invitation, visited the clinic. It is interesting to note what she accomplished with her slight knowledge of our method.

She had a sunny disposition, and I could well imagine a good mental picture of the children, as they greeted her every day in the classroom. She was devoted to her little pupils, and she was also a great lover of nature. She explained to her class, in her lovable way, just how the flowers grow, and made them understand what happens before the first shoots push their noses above the ground.

This teacher's name is Cecilia B. Eschbach, and the kindergarten is connected with the Brooklyn Orphan Asylum. Some time ago I received the following letter from her:

Dear Mrs. Lierman:

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

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

The children have learned to palm their eyes with good results. Two, who have casts in their eyes, play the swinging game and keep looking at the ceiling. Sometimes we sing, or sway to the rhythm of the piano. They are improving.

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

Very truly yours,  
Cecilia B. Eschbach.

## THE LITTLE TEACHER

Jennie, aged ten years, will always be remembered by Dr. Bates and myself. She was a very intelligent little girl for her age. She had the most to say of any child I knew. Most talkers do not impress you, they rather tire you,—but not Jennie. Her left eye had caused her a great deal of suffering and pain for a long time, so she was ready to adopt any measure to be cured. Palming and blinking helped her. Her vision at the beginning was 10/10 in the right eye and 10/200 in the left.

After her first visit to us, she was ready to cure all those in school who had trouble with their eyes. On her second visit she told us of her experience with some of the teachers and pupils. At first she was punished for causing a disturbance in the classroom. Later, when her teacher saw her without glasses, reading her lessons from the blackboard with perfect ease, she began to ask questions.

The result was that Jennie was allowed to palm for a few minutes before each lesson and then the rest of the class followed suit. It was interesting to hear her describe the way she went about improving the sight of her teacher who wore glasses for reading. We could not find out how long the teacher had been wearing glasses, but Jennie said that after the treatment she was not seen wearing them again.

Jennie's vision improved steadily and she had no more pain, but even though she was cured she came to the clinic just the same. While I was ill and could not attend clinic for a few months, Jennie came in very handy. She was so small that she had to stand on a stool to reach the letters on the test card with her finger tips. Dr. Bates would ask her to point to the different letters he wanted other patients to see, which was a great help to the patients and to him as well.

One day a boy, sixteen years of age, appeared for an examination of his eyes. He was disagreeable, and sneered because he wanted to be anywhere but at the clinic. As the room was crowded with patients, Jennie took it upon herself to help. She singled out this lad and with a voice of authority said: "Now don't be afraid, little boy, the letters won't hurt you. Tell me how much you can see." At this remark the boy laughed as loud as he could and took it as a joke. She finally convinced him that she was serious, and before he left the clinic he had normal sight. The boy had myopia, and the vision in both eyes was 15/70. When he left the room his vision had improved to 15/10. He came a few times after that, but he had no more trouble in retaining normal sight.

Another day Jennie demonstrated her intelligence by treating a doctor who had come from the West to learn about the treatment. Of course she did not know she was talking to a doctor, for if she had, I fear she would have lost her nerve. The doctor stood where he could observe best the patient being treated. Jennie approached him gently, saying: "Now how do your eyes trouble you?" One can imagine the doctor smiling at the little girl desiring to do so much for a big man. Without returning the smile she walked to her stool, chin up in the air as though she were a princess, and as she pointed to a letter, asked the doctor if he could see it. The patients were amused, but Jennie was not in the least troubled. The doctor patient said no, he could not see the letter at which she was pointing, a letter of the 70 line. He stood 15 feet away from the card. She told him to palm, and he obeyed, in jest at first, but when he saw that the little girl was really trying to help him, he did as she told him. The result was that the doctor's vision improved to 15/15. Jennie taught him how to rest his eyes by palming and alternately closing and opening his eyes. This doctor now uses the Bates method in curing his patients of imperfect sight.

## BENEFITS OF THE SUN GLASS

Another patient was Mary, a colored girl, twelve years old. She complained of such violent headaches that she could no longer attend school and stayed in bed most of the time. The school nurse had advised glasses, and she had come to get them. Mary kept her head lowered much of the time, but when I was about to treat her she tried to open one eye and look at me. The effort was so great that all the muscles of her face were contracted. As the light seemed to distress her, I decided to give her the sun treatment, that is, to focus the rays of the sun on the upper part of the eyeballs with a sun glass. I placed her on a stool where the sun could shine on her eyes, but when I tried to use the sun glass she was frightened to death. To reassure her I asked a patient, who had already had the treatment, to let me repeat it on her. When Mary saw her enjoy the sun bath, she readily submitted to it herself. Afterward her eyes opened wide and I was able to test her sight. Her vision was 10/50, both eyes. I showed her how to palm, and when, after ten minutes, she opened her eyes, her pain was gone and her vision had improved to 10/20. I was quite proud to have accomplished so much in one treatment.

Two days later Mary came again, and with her came the school nurse and a friend, both eager to

hear more of the miracle that had happened to Mary. Could it be possible, the nurse said, that the child had been cured as quickly as she said? I was surprised myself at the change in the patient's appearance. Her eyes were still wide open, and the constant grin on her face made her almost unrecognizable as the sad creature I had seen two days before. I told the nurse what had been done for the child and how she could help the other children in her school, by having them stand in the sun with their eyes closed, letting the sun shine on their closed eyelids for a few minutes every day. The nurse came a few times more to watch our methods, and told me that she was teaching all the children sent to her for examination of their eyes, how to palm. This always relieved them at once to some extent, she said. The more difficult cases, however, she sent to us without delay.

### **NYSTAGMUS**

Another remarkable cure was that of a girl with nystagmus, a condition in which the eyes vibrate from side to side. Cases similar to hers come to us from time to time, and they are always benefited by palming. Her vision was 10/30. She improved quickly and soon obtained normal vision. When anything disturbed her, the vibration returned. This always happened, she told me, when the teacher asked her a question. At the same time she lost her memory. The teacher allowed her to cover her eyes to rest them, and in a few minutes the vibration ceased and her memory improved. Before she came to the clinic she often became hysterical and was obliged to leave the class-room. Later the hysterical attacks disappeared.

### **HYSTERICAL BLINDNESS**

A puzzling case was that of a little girl, ten years of age. A patient of ours who came from the same school which she attended, told me that the child was stupid, and she certainly appeared to be so. I asked her if she knew her letters, and in trying to reply she stuttered painfully. I tried to reassure her by speaking as gently as I could, but without avail. I could not get her to answer intelligently. I tried having her palm, without results. I held the test card close to her eyes, and asked her to point out certain letters up to the fifty line, as I named them, but only in a few cases did she do this correctly. Completely baffled, I appealed to Dr. Bates. He asked the child to come to him and touch a button on his coat which she did. He asked her to touch another button, but she answered:

"I don't see it."

"Look down at your shoes," he said. "Do you see them?"

"No," she answered.

"Go over and put your finger on the door-knob," he said, and she immediately complied.

"It is a case of hysterical blindness," the doctor said.

The child attended for some time regularly and became able to read 10/10 correctly with both eyes. Palming, blinking, swinging, and using her imagination for letters of the test card and other objects, were a benefit. She stopped stuttering and soon lost her reputation for stupidity. She became a good Samaritan in her neighborhood, for on many a clinic day she brought with her some little companions to be cured of imperfect sight. She never had any doubts as to our capability to cure her little friends, and so far we have not disappointed her. I hoped she would not bring anyone who was beyond our power to help, for I would have been sorry to see that sublime faith, which we had inspired in her, shattered.

### **THE TWO GRADUATES**

Two of our patients graduated at the end of the school term. After the final examinations they told me that they had been greatly helped in their tests by the memory of a swinging black period. One of them was told by the principal that if she failed to pass, it would be because she refused to wear glasses. She gave the principal Dr. Bates' book, which was one of her precious possessions, and after that, though he watched her closely, he did not say anything more about her eyes.

"I made up my mind to pass without the aid of glasses," she said, "and 'put one over' on the principal, but you can bet I never lost sight of my precious swinging period. The book has become a family treasure," she continued. "When one of us has a pain in head or eyes, out of the bookcase comes the book. It is natural to see mother palming after her house work is done. She enjoys her evenings

with her family, because palming rests her and she does not get so sleepy before bedtime."

The other graduate said: "I did not have to think of a black period when the test was easy, but when I had to answer questions in the more difficult subjects, I certainly did find the period a life-saver. I know I would have failed without it."

### **HOW MARIE HELPED HER MOTHER**

Marie, ten years old, told us that she had headaches, and the pain in her eyes was so bad at times that she was put to bed for a few days. Her mother directed her to ask us for glasses. The doctor in school had ordered her to get them.

At first I found it hard to make her smile. Her head and eyes pained her so much that she found it an effort to look pleasant. Then, too, she did not want glasses,—she said they frightened her.

I placed her in a comfortable position and showed her how to palm. After I had treated several patients, I asked Marie to remove her hands from her eyes and to look up at me. She did so and smiled. That was encouraging. Adults, especially some women I know, imagine that there is something wrong when one smiles. Marie smiled because the palming cured her pain.

Her sight was tested and I found that her vision with each eye was normal. While she was standing, I taught her how to swing her body from side to side. I did the swinging motion with her to be sure she was doing it right. At first she complained of dizziness, which showed that she was making an unconscious effort to see things stationary. When I told her to take it easy and swing more gracefully, the dizziness left her and she became more relaxed and enjoyed it.

"I could keep this up all day," she said. "I like it because all my pain is gone." She was instructed to continue the palming and swinging at home and to come again the next clinic day.

When Marie returned, she brought her mother, who was anxious to know what there was about palming and swinging that could cure eye strain. Was it a faith cure or did we perform a miracle? She said that Marie had suffered for a long time with pain in her eyes, which prevented her from attending school regularly. Now, for the last few days Marie, after school, had played with the children in the street instead of going to bed. She had studied her homework without being told, after palming her eyes for ten minutes or longer.

The mother was eager for me to know what palming had done for her also. "At first my husband and I thought Marie was joking," she said. "We did not think that such a simple thing as covering the eyes with the palms of the hands could relieve pain. Ever since my children were born I have suffered with backaches and my eyes have been troubling me. Marie suggested that I should try the palming. As a result my eyes are rested and my backache has left me. Now, won't you please tell me about the swing, too?"

I went through the motions with her until she was able to do it. The last time I saw her she told me that she was not half so cross with her babies since she learned how to swing her body, and see things moving. Palming helped her to read to her husband. She said Marie did not complain of pain any more, but was more willing to help about the house and never retired until bed time. Relief from strain, relaxation through palming and swinging the body from side to side, cured both this tired mother and Marie.

### **THE HIGH SCHOOL BOYS**

During the last year many school children have been benefited and cured of their imperfect sight at our clinic. Some had been wearing glasses, but a larger number had not worn them. The latter were cured quickly and in a few cases needed only one treatment. The records show that all those who were wearing glasses obtained better vision without them. There were no exceptions. For the benefit of those who are interested in eye clinic work, I shall tell about a number of high-school boys, all from the same school, who came for treatment.

A director of a Boys' Physical Training Department in one of our largest high schools in New York City heard of our clinic. About nine-tenths of the boys under his care were wearing glasses. Others struggled along without them, even though they had imperfect sight. The boys were between the ages of 13 and 17 years. Late in the fall of 1924 one of them, by the name of Arthur, came with a note from the physical director. We accepted him gladly and he began treatment under the supervision of Miss Mildred



Shepard, my assistant. His vision on the first day was 20/100 with each eye. It was noticed that his eyes were partly closed as he looked at the test card. When placed in a bright light, he had difficulty in keeping them open, and his forehead was terribly wrinkled. Anyone observing him for the first time would have thought that Arthur never smiled. I thought so myself as he appeared week after week, during the winter months, and through the spring. Recently I treated him and helped him to read 10/10 on a strange card. I also received a shock. He smiled. By closing his eyes to rest them, and flashing each letter, he read 10/15 without a mistake. I wanted to stop his treatment then, because there were about twenty others waiting. Arthur begged, however, for one more chance. We gave him the sun treatment and then he returned to the test card and read 10/10. It was at that time I found that Arthur could really smile. Palming, blinking and swinging, with sun treatment, cured him.

The next case was William, whose vision was 10/200 with each eye. I do believe that William practiced faithfully at home and elsewhere but he is just one of many cases of myopia who are slow in obtaining a cure. He is not discouraged, and knows that he will eventually have normal vision if he keeps on. His sight improved to 10/40, or one-fourth of the normal, in six months.

The physical director wrote to me again, asking if he might send more of his boys who were anxious to get rid of their glasses. We have not the room nor the time to take care of even a small percentage of those who are crying out for help. I read the letter to Dr. Bates. He did not answer right away, but just looked at me. Then he said: "Now, you know how much I love school children, and you also know how much I disapprove of glasses." I said: "All right, that settles it." My answer was: "Send them along. There's no limit to the number."

Twenty or more came in response to my letter, and all of them were nice boys. How glad I was that I wrote what I did. After they had received their first treatment, and I had spent more than three hours with them, Dr. Bates appeared at my room to ask if I were tired. His voice sounded most sympathetic, but I was perfectly relaxed, and not a bit tired. As I instructed the boys to palm and swing, I practiced with them. As their vision improved, so did my nerves become more relaxed. I was nappy, but not tired. Treating the boys was not easy, but since every one of them did as he was told, the task was made lighter.

Samuel had worn glasses about two years. He had a great deal of pain in his eyes and his sight was getting worse. The optician who had fitted him with glasses said that he would have to wear them the rest of his life. His vision without glasses was 10/200 with his right eye and 10/100 with the left. He stared continuously, a practice which, I believe, was the main cause of his pain. The first thing I did was to teach him to blink. This relieved his pain. Palming and the swing improved his vision in both eyes to 10/50 on his first visit. Every time he was treated, his vision improved for the test card. At times he did not do so well and he would apologize.

When I became better acquainted with Samuel he said: "You see. Mother is not forced to do it, but she peddles things, and helps my father to earn more money. In this way Mother will see that I can go to college." I told him that he should be proud of such a wonderful mother. I look up to her with great respect and honor, because of her courage and sacrifice. Heaven bless such mothers! Samuel had to have four months treatment before he could read with normal vision, but he was determined and won out.

Abraham had symptoms of St. Vitus' dance with much pain in both eyes. His vision was: right 10/15 and left 10/10. He had no organic disease of his eyes but the ophthalmoscope showed eyestrain. After three treatments the symptoms of St. Vitus' dance had entirely disappeared and he had no more pain. His vision also became normal, 10/10.

Morris hated glasses and wore them but a short time. He had normal vision in his right eye, but only perception of light in the left. I held the test card up close to his left eye, and told him to cover the right one. By alternately blinking and flashing the white of the card, he became able to see the letters as black spots. He was instructed to practice with the test card every day, seeing the letters move opposite to the movement of his body. While doing this, he was to keep his right eye covered. After the third treatment he read the bottom line of the test card at three feet, or 3/10 with the left eye. He had been told by many doctors that nothing could be done for the left eye, because it was incurably blind. Dr. Bates examined him with the ophthalmoscope and said the trouble was called amblyopia exanopsia, or blindness from effort. Dr. Bates stated that such cases are usually pronounced incurable. Morris believes that with constant practice there is no reason why he should not obtain normal vision in his left eye.

Benjamin had never worn glasses. For a long time the constant pain in his eyes made it difficult for him to study. The ophthalmoscope revealed only eyestrain. His right vision was 10/10, left vision 10/20. After palming a short while and with the aid of the swing, the vision in his left eye improved to the normal 10/10. He had four treatments altogether. On his last visit I helped him to read 20/10 right eye

and 20/20 left. He was instructed to practice with very fine print daily, and this, I believe, had most to do with relieving his pain permanently. He was more than grateful for the relief he obtained. He had a little brother named Joseph, who was wearing glasses. Timidly he asked me if I would help him, too. "Surely," I said. "Bring him along next time."

Joseph had been wearing glasses for three years, but his sight was not poor without them. Without glasses his vision was 10/15 with each eye. Blinking while he was swaying improved his vision to the normal in five minutes' time. He promised not to put his glasses on again, and came to me for four more treatments. These were really unnecessary because his sight stayed normal, 10/10. If our method had been in general use in the schools, this boy and others would not have been forced to wear glasses.

Hyman wore glasses four years for progressive myopia. His vision with his right eye was 10/100 and 10/70 with the left. After his first treatment he was able to read 10/50 with each eye. Constant daily practice, by palming and improving his memory, brought his vision to the normal, 10/10. This boy required only five treatments.

Charles wore glasses about four years, although he had no organic trouble, merely eyestrain. His vision was 10/30 with each eye. He was told to close his eyes, and while palming to remember a small square printed on the test card. He was directed not to remember all parts at once, but to remember or imagine one part best at a time. His vision then improved to the normal, or 10/10. Sun treatment was also given him. Charles was cured in one visit.

Harry had worn glasses one year. His vision was 10/30 with the right eye and 10/70 with the left. Regular daily practice and the sun treatment improved his vision to 10/10 in three visits. He vows that he will never wear glasses again.

Tobie was a fine, lovable chap, a trifle younger than the others. He was not so sure that he liked to see his name in print—I told all my wonderful boys that I was going to write about their cases—but he did not object when he realized that it would be a help to others. His vision was 10/50 with the right eye and 10/70 with the left. Palming and sun treatment improved his sight to normal, after three treatments. The other boys were cured mostly with one treatment. It was only a matter of teaching them how to use their eyes right.

### **THE STORY OF LILLIAN AND HER SISTER ROSE**

My work was not confined to the clinics but extended to other places as well. Occasionally when I visited a department store to make a purchase, the girl who waited on me might be suffering from the results of eyestrain, pains in the eyes or with headaches. It always gave me pleasure to give them immediate relief with the aid of palming, swinging, or in some other way. I could write many stories about the help I gave these girls, whose gratitude was indeed worth while.

I live in the suburbs and commute. The trainmen know me very well, and always come to me to have a cinder removed from their eyes, or to be helped when their sight is poor.

Every day during the fall, winter and spring at our station I meet a cheerful group of girls, who attend high school in another town. Some of them I have known since they were babies, and while I am in their company on the train, I forget sometimes that I am grown up and join them in their fun. Several of these girls wear glasses, and I offered to cure them any time they were willing to discard them.

No more was said on the subject until one day, just before school closed for the summer, one of the girls appealed to me to help her. She was Lillian, aged 16, who had a higher degree of myopia than any of the others. I insisted that she consult her parents first. If they were willing and would cooperate with me, I would try my best to cure her before school opened again in the fall.

Lillian was very much excited, and begged the other girls to discard their glasses also. One said her mother feared that such a wonderful cure could not be accomplished. Another girl thought she would wait awhile. I still feel that they did not believe in me. The day after school closed, Lillian called at my home with her sister, Rose, aged 13, who had a decided squint of her left eye. Lillian had not spoken of Rose, as she was afraid of imposing upon me, but when Lillian came to me, Rose made up her mind that she would be cured also.

I fastened a test card to an oak tree outside of our house, and placed my patients ten feet from the card. I started Lillian first because I wanted above all else, to cure her as I had planned. With glasses on she read 10/15, and with glasses off 10/70. I taught her to palm and to remember something perfectly, while her eyes were closed, such as a white cloud, sunset, or a flower. She did this for a few

minutes and then, without a stop or making a single mistake, she read two more lines on the test card. Her vision had improved to 10/40, both eyes. Then I tested each eye separately. Her vision, fortunately, being the same in each eye, it was easy to proceed with the treatment. By closing her eyes, and remembering the last letter she was able to see on the card, she became able to read another line, 10/30. When she made the slightest effort to read the smaller letters on the card, they would disappear. I explained to her that when she stared, she made her sight worse, and that was her main trouble. I told her to keep her eyes fixed on one letter without blinking, and see what happened. Immediately she began to frown, her eyelids became inflamed and she complained that her eyes hurt her. She said, "Now I know why I have headaches and pain."

On her second visit her vision improved to 10/20. I had taught her the long swing, moving her head slowly from side to side from left to right, looking over one shoulder and then the other. She had to be reminded, as all patients do, to stop staring and to blink her eyes often, just as the normal eye does. All through the summer, Lillian practiced faithfully, getting a great deal of encouragement from her sister Rose and her loving mother and father. She came to me for treatment about once a week. A few weeks before school opened, we began treatment indoors with electric light instead of outdoors in the sunlight. I did this purposely because I knew that the light in school was not so bright as outdoors. When she first read the test card by electric light Lillian became very nervous and frightened. All she could see was the large C on the 200 line at ten feet. Palming for a few moments helped her to relax enough to read several lines. Swinging and looking at one letter, then shifting her eyes somewhere else and looking back at the next letter, helped her to read 10/15.

At each visit she improved and now reads 10/10 all the time. Before she began treatment she had to hold a book at three inches from her eyes, while reading,—this with glasses on. Since she was seven years old she had worn glasses constantly, and during all that time she suffered with headaches every day. She told me that from the day I removed her glasses and started the treatment, she had neither headaches nor pain in her eyes. So grateful is she that I am almost swallowed up with caresses when she sees me.

Some friends whom she had not seen for a year called to see her family, and to enjoy a day on their farm. Lillian had worn glasses for so many years, that she was not at all surprised when her friends did not know her. She stood in the doorway ready to greet them, but they thought she was a stranger. Her whole facial expression had changed. The eyelids, which were formerly swollen from strain, were natural looking, and her large brown eyes were quite different from the tiny, marble-like eyes that tried to see through the horrible, thick glasses she had worn previously. When her friends finally recognized her they had to hear all about the treatment and cure.

If Lillian had not been so faithful with the treatment, I could not have made such rapid progress. There were many days during the summer when she became discouraged and worried for fear she would have to put on her glasses again. Her mother was a great help to me in many ways. She was careful to hide Lillian's glasses so that she could not possibly wear them again even if she wanted to.

On the first day of school I met her with the usual group of girls on the train, and as she passed she pressed my hand and said, "Wish me luck." I asked her to telephone me that evening, and she did, saying:

"When my teachers saw me they were surprised at the great change in my appearance. I told them all about the treatment and what you did for me. When I asked to be placed in the last row of seats in each classroom, they were amazed. You see when I wore my glasses I always had to sit in a front seat near the blackboard. Today I was able to read every word on the blackboard in each class room from the last row of seats where I was sitting. I also read from my books at eight inches from my eyes without any discomfort whatever."

I praised Lillian and said that I was glad for her. I am more than happy to have given her my time evenings, when I needed rest after a day of hard but enjoyable work.

At each visit, while Lillian was having a treatment, her sister Rose watched and listened attentively to everything that was said. She had convergent squint of the left eye, and when she became excited or tried to see at the distance, that eye would turn in, so that only the sclera or white part was visible. At the age of three, it was noticed that her left eye turned in, and when she was four years old, glasses were prescribed for her. I tested her sight and with both eyes she read 10/100. Then—with each eye separately, she read 10/70 with the right and 10/100 with the left. I told her to palm her eyes and to remember the last letter she saw on the test card. She kept them closed for at least a half hour, and when she again read the card, her vision with both eyes had improved to 10/20. I tested each eye separately again. This time she read 10/20 with the right eye, and 10/40 with the left eye.

I thought the improvement in the vision of her eyes was wonderful, and Rose was delighted with the

results of her first treatment. Her sister Lillian was thrilled as she saw that left eye straighten as the vision improved. She came to me with Lillian once every week for treatment, and carried out to the letter everything I told her to do at home.

She was directed to wear a cloth patch over her good eye all day long, and to do her usual, duties for her mother as well as she could, with her squint eye. What a faithful child she was, and how she did hate that patch! I asked her every time she came how she got along with it. "Well, Mrs. Lierman," she said, "I don't like that black patch at all. I want to take it off many times every day. I don't like to have my good eye covered, but I know I must wear it if I want to be cured. I do want to, so I just think of you and how much better my eye looks, and then I don't mind a bit."

On her second visit her left eye improved to 10/20 and her right eye became normal, 10/10. Never did I have a more enthusiastic patient. On her third visit she gave me a package sent by her mother, who tried in her kind way to show her gratitude to me. The package contained delicious home-made sweet butter. Rose continued her visits, and in two months her sight became normal, and her eyes perfectly straight. She practiced faithfully and the result was that, one week before school started, she was able to remove the patch permanently, without any return of the squint.

The first day at school was very exciting to Rose. She said that the teacher did not recognize her until she smiled. When Rose smiles you cannot help but know and love her. Her aunt says that a miracle was performed.

Thereafter Rose had no trouble in reading the blackboard from the last seat of her class-room, where she asked to be placed, and she saw the book type much clearer than she ever did. Rose had been attending school for a week or so, when her teacher noticed that a pupil, aged 12, could not read the blackboard from the front seat where she was sitting. The teacher told the girl to have her eyes examined by an eye doctor and to be fitted with glasses. Rose overheard the conversation and promptly met her schoolmate at the door. Rose told her how she had been cured without glasses, and that she would be willing to show her how to be cured also. The next day at recess instead of joining the class outdoors for exercise, Rose and her schoolmate went back to the class room. With the aid of a Snellen Test Card, which Rose had taken with her that day to school, she improved the sight of the little girl from 12/70 to 12/15, by palming, blinking and swinging. Every day the two little girls worked faithfully with great success and in less than a week both children occupied rear seats from which they were able to read the writing on the blackboard without difficulty.

## **THE PARTY**

I am anxious to tell about fifteen school girls, all from one class of Public School No. 90, New York City, Their ages ranged from nine to fourteen years. On January 5th, 1922, they first appeared. That day Dr. Bates and I had to plead for admission into our own room.

In addition to these school girls, about thirty adults, also were waiting for treatment, and all of them made a rush for us when we arrived. I found that the teacher of the girls, who was very near-sighted, was being treated by Dr. Bates at his office. The progress she was making encouraged her to send to the clinic those of her class who were wearing glasses. When I asked who came first all hands went up at once.

I could see from the start that I should have my hands full. The girls' faces wore a strained expression and, because of their actions and their manner my heart went out, not only to them, but to their poor near-sighted teacher.

Three out of the fifteen girls had squint, and two of the three were sisters. These sisters, Helen, aged 10, and Agnes, aged 12, both had squint of the left eye. Helen read 15/20 with both eyes, with glasses on. With glasses off she read 15/40. After palming and resting her eyes, the right improved to 15/20, and the squinting left eye improved to 15/30 without glasses. On January 17th, she read 15/15 with each eye separately. Agnes, whose squint was worse than Helen's, had 15/70 in the left eye on January 5th, and on January 17th improved to 15/20. The right eye improved from 15/40 to 15/15 from January 5th to January 17th.

Frieda, who also had squint of the left eye, improved from 15/40 to 15/15 in the same length of time. Her right eye had normal sight. All the rest of the fifteen, I discovered, were near-sighted.

Mary the youngest and best behaved was nine years old. On the first day she came she was suffering from terrible pain in her eyes and head. After she had closed her eyes and rested them for a short time

the pain went away and her sight improved from 15/40 to 15/20. Mary, however, failed to practice at home as she was told; nevertheless, the pain did not return even though her sight had not further improved.

Muriel and another Mary had progressive myopia. Muriel became so frightened the first day she came that she ran out of the clinic as fast as she could. She feared that the doctor would apply drops or hurt her in some way. Next day at school, Mary told her what she had missed by running away. Later, after three visits to the clinic, Muriel became more enthusiastic, and even made better progress than Mary. Muriel's sight improved from 15/70 to 10/10. Palming, resting her eyes, did this for her. She practiced faithfully at home.

Mary's vision was 15/15 with glasses. Without them 15/30. Twelve days later her sight had become as good without glasses, as it had been previously with them. She also practiced faithfully, and her father became interested and helped Mary at home with her chart. The remainder of the fifteen had about the same degree of myopia, and all were eager to be cured. It was encouraging to see them improve after they had rested their eyes for just a few minutes.

When I had finished with these cases, Dr. Bates called my attention to a girl from the same school, who had opacity of the cornea of the left eye. She was twelve years old, and had had this trouble since she was a year old. She had no perception of light at all in that eye when she came. On her second visit to the clinic, she could see light in the left eye for the first time. On January 17th, twelve days later, she began to see the letters of the test card. Six weeks later her vision became normal, with the disappearance of the corneal opacity. Dr. Bates was astounded, for he never saw such a case recover before. It was the long swing that helped her most.

Is it a crime to help the sight of these poor children? Should they be forced to keep on wearing glasses to benefit the man who sells them? I am willing, and want to devote the rest of my life to this wonderful work, but we need help instead of criticism. Some mothers are helping the children in their homes. Teachers who are being cured of imperfect sight without glasses, have a very beneficial influence upon the children. But the prejudice of some of the authorities, based on ignorance of the truth, is a stumbling block. If they would only investigate the facts, we would all be better satisfied.

The second visit of these children to the clinic is one to be remembered. On January 7th, Dr. Bates and I arrived somewhat late to be greeted by an excited nurse. I knew that something unusual had happened, because this particular nurse had an even disposition. How my heart ached to hear her say, that, never in all her life, had she come in contact with such bad girls! One of them had invaded a doctor's room and placed herself in the operating chair. A team of horses could not move her. Others yelled so loud that the doctors could not hear themselves talk. Well, I cannot explain in writing just how I felt. I treated each one with tears in my eyes and a lump in my throat. I had planned to share between them some test cards to practice with at home, but I sent them home without them that day.

On January 14th, they informed me that the school doctor said they must put on their glasses again, regardless of the fact that the sight of all of them had improved. The mothers felt quite differently about it, however, and they declared that their children should not put on their glasses again, no matter what the school nurse or doctor ordered. After that, my girls became willing assistants, and were more determined than ever to be cured. I will confess that I had no easy time of it, but when they saw that I meant real business, rapid progress was made, which interested Dr. Bates very much. I promised them a real party at our office, with ice-cream 'n everything, just as soon as they all could read 20/20 on the test card, whereupon one of them yelled, "Oh, boy, me for normal sight!"

They asked for test cards, which I was glad to give to them for practice at home. Instead of playing on the streets after school they went to each other's homes to practice for an hour or more. Then I was taken ill and was absent from my precious clinic for two months. My pain was bad enough, but my heartache for this group of girls, who might lose interest in being cured without glasses while I was away, was a greater pain.

During my illness I stayed at one of the large hotels in New York City. One afternoon while I was convalescing, my nurse answered the telephone in my room. She turned toward me and with a frightened look, she said: "The operator says there are a lot of wild Indians in the lobby asking for permission to visit Mrs. Lierman."

Well, I had no more pain, no more heartache, for I knew they must be my rascals from the clinic. I answered: "Please have them come up."

When they filed in, one would have thought they were angels, and that they always had been angels. How glad I was to see them, and oh, how glad they were to see me!

Yes, they had good news,—they practiced faithfully, and if I would only get well soon and come back, they would show me that nearly all of my precious jewels had normal sight.

I did return to them at the clinic very soon after that, with the aid of crutches, and was mighty glad to get back. The fifteen girls were all there, and each one in turn stood twenty feet away from the test card, and read the twenty line for me. When my strength returned, we arranged for the party which was to be some time in April.

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

Two were not there. One of them stayed away because she had put her glasses on again. The teacher informed me that she did not do so well in her studies, nor with her reading on the blackboard, after she had put on her glasses. Later, when the girl took off her glasses again, she was immediately benefited by the treatment, and soon obtained normal sight. She became more accurate in all her studies. I was told that previously, while wearing glasses, she read figures incorrectly, and usually made serious mistakes. This particular girl was one of the most nervous and unruly of any girl patient I have had. She worried her school teacher, because she found it hard to be truthful. During her treatment, Dr. Bates and I noticed, that, as her vision improved, she became less nervous and her teacher said there was a marked improvement in her conduct in school.

After clinic was over, two taxicabs drove the kiddies with the doctor and myself, through the East Drive of Central Park. The flowers were budding here and there, and it was like a moving picture show to watch the kiddies. One of them asked me if skunk cabbages grew in the park, and who fed the squirrels in the winter time. Another, though born in New York City, had never been to Central Park nor to the country. The party was a decided success.

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

"What should the owner do to redeem it?" was asked, and the answer was: "The owner must go to the next room and read the Snellen test card at ten feet, from top to bottom without a mistake." The doctor promptly obeyed; while two of the children went with him, to see that it was read correctly.

I could go on telling more of the funny things that happened on that wonderful occasion, but I would like to add what the children said, as they filed out of the room: "Thank you for the party, but thank you most of all, Dr. Bates, for joining us in the fun."

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

### **CHRISTMAS AT THE CLINIC**

To me, Christmas is the most wonderful day in the year. To hosts of boys and girls throughout the world, it is the happiest day. But there are other little folks—all too many of them—who do not know its meaning, and whom Santa Claus seems to have quite forgotten.

This fact was brought home to me very forcibly during my first few years at the clinic. Just before Christmas, a boy of seven years came with his sister, a little girl of five, for treatment. Both the children were thinly clad and far from clean, and seemed to feel perfectly at home near a warm radiator. There was nothing wrong with the girl's eyes, but the boy had a severe inflammation of the eyelids, along with a slight squint of the right eye, I was not surprised to find later that this inflammation was caused by uncleanliness. Before treating him I asked him what he expected from Santa Clause. He looked up at me and said:

"Oh, he ain't never came to our house. I only sees him in the store windows."

"But you do have a Christmas tree on Christmas eve, don't you?" I asked.

"Nope," said he, "we never had none."

I began to think I wanted to use my influence with Santa Claus on behalf of this neglected child, but my present thought was to treat him. No, I did not begin with palming this time. I washed his eyes and

face with water, and judging by the color of the towel, when the operation was over, I should say that he had not been washed for a week or more. I tested his sight, and with both eyes he read the ten line at fifteen feet. Then I covered his good eye, and with the squinting eye, the right, he read the seventy line (15/70). I taught him how to palm, and while his eyes were covered, I told him the story of the Babe of Bethlehem. This worked like a charm, and in a very short time his right eye improved to 15/30. I promised him that Santa Claus would surely have a present for him at Christmas time if he would cover his eyes to rest them many times every day.

The progress he made was good. A week later he read 15/15 with the right eye, and only at intervals did the eye turn in when he began to strain, I learned later that his father was in jail for theft. He had to mother his little sister and baby brother, who sat in a high chair most of the day, while his sickly mother went out to work. Yet he found time to practice. Before Christmas he had normal vision in both eyes, though the right eye turned in at times the least little bit. As for the inflammation, it had completely disappeared under the influence of the sun treatment and the daily use of water.

The day before Christmas I purchased a Christmas tree with some trimmings, and filled a basket with good things to eat. I also had a little gift for each child in the family. On Christmas eve I brought them to his home. The poverty I found there wrung my heart, but I had the pleasure of knowing that the children at least would have a happy Christmas. The sight of the Christmas tree filled them with rapture too great for speech, and the gratitude of the mother was pathetic. She was thin and careworn, she hardly ate her share of the hot meal I helped her prepare. Not once did she speak of her husband, but I have a suspicion that she loved him.

Shortly afterward the boy's visits to the clinic ceased, and on going to his home again, I found the scanty belongings of the family upon the sidewalk, all covered with freshly fallen snow. I tried to find them, for I wanted so much to help them if I could, but my efforts were in vain. Next day I returned and was told by the neighbors that the mother was in a hospital and that the children had been placed by a charitable society in an institution.

I never saw nor heard of my patient again, but he inspired me with the idea to make my big family at the clinic happy. Since then, every child and adult who came to us was remembered in some way at Christmas time, although we were not permitted to have a tree at the hospital. Incidentally, I found that speaking of Santa Claus was an invaluable aid in helping the eyes. Mothers often warned me that their children would not obey my directions. I would listen, of course, and then I would talk baseball or Santa Claus, according to the season of the year. The scheme never failed to bring good results. I have known the most restless of small boys to sit on a stool, or stand in a corner, for ten minutes or longer without moving, while I would tell the story of "The Night Before Christmas." It is also astonishing how much interest a small boy takes in baseball. Nine times out of ten when I ask a boy to imagine something perfectly, he will say:

"I can imagine a baseball very well."

I think if Babe Ruth knew how my boys admired him, he would provide more seats for them at some of his games, and I think, too, that he wouldn't mind playing Santa Claus and providing baseballs for some of my patients, as he has for many other boys. I am sure nothing would make them happier, even though baseballs are of little use in a city that does not provide enough playgrounds for its children.

Santa Claus, as I said, is a fair rival of baseball, and appeals to girls and boys alike. I begin during the month of September to talk of the visits he makes to the clinic every year, and the result is magical.

Joseph, nine years old, was quite unmanageable at first, and could not be enticed to palm, nor even to stand still long enough for me to test his sight. At one time I got tired of coaxing him, and told him to wait until others had been treated. His mother, a very nervous woman, wanted to thrash him, but the little fellow didn't seem to mind that a bit. He had been sent by a school nurse for glasses. His eyes were so sensitive to light, that he could only partly open them. When I was able to get back to him I said:

"If you will read this card for me and do as I tell you, I will have you come here the day before Christmas, when Santa Claus will give you something nice."

The suggestion worked splendidly. He read the card with both eyes together and with each eye separately, getting most of the letters on the forty line at fifteen feet. He palmed when I showed him how, and before he left, his sight had improved to 15/20. After he had palmed for ten minutes or longer, his mother remarked how wide his eyes opened. Joseph came quite regularly after that, and was grateful for the gift Santa Claus brought him at Christmas time. Even though he was cured in a few weeks, he continued to come, just to say "Hello" to the doctor and myself.

Shortly before Christmas I treated a little girl whose age I cannot exactly remember, I should imagine that she was nine or ten years old. Her wistful eyes looked up into mine, and I surmised that

she was very poor and lonely. She told me that her mother and father were both dead, and that a kind neighbor, who already had nine children, was mothering her too. I knew just what I would like to have Santa Claus give her, and tried to figure out just how much I could stretch my Christmas fund, so that I could buy clothes and shoes for this little girl. It could not be done, because I was poor myself. However, I doubt if these useful things would have made her as happy as did the dolly and the necklace which I ultimately gave her, and which cost only a trifle. She was so overcome with joy that she could scarcely talk.

There was nothing seriously wrong with her eyes, but she was under a nervous strain which caused her sight to blur at times. This I soon corrected, and she was very happy when told that she did not need glasses.

### **OUR LAST CHRISTMAS AT THE HARLEM HOSPITAL CLINIC**

We are no longer at the Harlem Hospital Clinic, and I keep wondering if my beloved kiddies will be taken care of at Christmas time, or whether they will be neglected. I miss them very much. Each year we have a tree at our new clinic, distribute gifts as in the past, and extend our good cheer as far as it will reach. But my heart goes out to the dear ones we have left behind in that other clinic.

I shall try to paint a mental picture of our last Christmas with them. Little Patrick had been coming to us for eight weeks or so before Christmas. His difficulty was in seeing the blackboard in school. His teacher had sent him to us for glasses and offered to pay for them herself, as was explained in a note which Patrick had with him. He was such a dear little fellow, and one of the best behaved boys in her class, she said; his family was very poor, but they were good people, and for that reason she wanted to pay for the glasses.

On Patrick's first visit, Dr. Bates examined his eyes and said he was near-sighted. With the test card his vision was 15/100 with each eye. He did not like to palm, but he kept his eyes closed for over half an hour as he was told. On that day his vision improved to 15/20, which was unusual. I told him to rest his eyes by closing them often every day. The second week in December he read 15/10 on the test card with each eye.

When Patrick was told to come for his Christmas gift—and perhaps an orange with some candies—he begged for permission to bring his baby sister and three brothers. I believe it was an unselfish thought on his part, because he could not very well accept a gift when his sister and brothers had none. He was invited to bring his family to the Christmas party, and when I saw him that day he was radiant with smiles.

Our room surely looked as though Santa Claus had left his pack there. In one corner of the room several dozen dolls were arranged, waiting with their arms outstretched for the little girls. An operating table was loaded with games and toys for our boys. Large Florida oranges, enough for every one, both young and old, filled another corner of the room. Cornucopias, decorated with tinsel and filled with candies, were hung all about, a pretty sight to see. Dr. Bates, himself, arranged them on the windows and screens, and wherever they possibly could hang. The doctors and nurses from other clinics of the Harlem Hospital came to our room and admired the arrangements. Dr. Bates was very much excited about it all, and his face lighted up with smiles as the children and adults entered the room. He watched the expressions of the little ones, and his heart was filled with joy, because his clinic family was so happy.

For several years it had been our pleasure to greet Dr. Neuer in our room at the Christmas party. It was his delight to take one of the dollies and go from room to room, displaying that doll with all the joy of giving. Children suffering with tuberculosis, of whom many were cured by him, were never forgotten at Christmas time. When his eyes began to trouble him he came to Dr. Bates, and was cured without glasses. He did not mind in the least standing with the rest of our clinic patients, and when Dr. Bates invited him to his office, he said the dispensary was good enough for him. Shortly after our last Christmas party there, he was taken seriously ill with pneumonia, and died. He was beloved so by the poor that we know they will miss him, for he was a good Samaritan. He gave his life for his best friends,— his clinic patients.

For ten years I have watched the happy faces of girls and boys at Christmas time. Tired mothers, with sick babies in their arms, also received their share of useful gifts. Dr. Bates, though he was always busy, found time to hand each of his patients a gift, and to wish them a Merry Christmas.

Bridget, the Dispensary scrub woman, who had heard some weeks before that our patients were to



have a treat again, decided, all of a sudden, that her eyes needed treatment. Just to please her we prescribed some harmless eyedrops, for there was really nothing the matter with her eyes. She was big, fat, and good-natured, and walked around as though she owned the place. Bridget wanted to be our patient at least until Christmas time, so we allowed her to fool us.

On the day the gifts were distributed, a colored woman brought her little girl to be treated for an infection of her eyes, and was waiting to be attended. Instead of being pleased at all the pretty toys she saw, she looked very sad and downhearted. After Dr. Bates had treated the little girl, he sent her to me for a dollie. The mother begged me not to give her one, because she had two younger children at home who would not have any Christmas on account of their poverty. The little girl was taken care of by me, while the mother was sent home post haste, to bring the little brother and sister. She returned with her brood, and the tears came to her eyes when a doll was given to each of her girls and a mouth-organ to the little boy. Mother's arms were filled with oranges and candy, and there were no more tears. This little family had always been well provided for while the husband and father was living, but he was killed while at work, and the mother, being in ill health, found it very hard to keep her family together. Before she would accept a gift from us, I had to convince her that she was not accepting charity, and that real friends were merely sharing their gifts with us at the clinic.

### **CHRISTMAS, 1923**

I wish everyone who contributed to our Christmas Fund could have been with us on the Christmas of 1923. We had our first tree. Not only did our clinic patients enjoy it, but our private patients as well. I fear, too, that on more than one occasion, a private patient was kept waiting much longer than he cared to wait, while Dr. Bates hovered around that Christmas tree. Dr. Bates does not like to neglect his work, but that tree needed his attention, he thought, even though he was keeping his patients waiting. His orders were not to purchase anything cheap. The clinic family is precious to him and must have the best of everything. When it came time to distribute the toys and candies to the children, I saw him peeping in at the doorway, and this added pleasure of having a tree for them did him a world of good. The children all love him because he does so much for them.

At the Harlem Hospital we were not permitted to have a tree in our section, but the Christmas spirit prevailed in our room there just the same. Deep down in my heart, I wished each year to have a tree, in addition to gifts for our patients at the clinic. With the reserve left over from the year before, which was big enough to bring happiness for all, we were able to have gifts, and a tree that reached from the floor to the ceiling.

Everyone connected with our office helped to trim the tree, which stood in a corner of the reception room where it could be seen by all. Pretty dolls for the little girls peeped from beneath the lower branches. Games and mechanical toys were placed where every boy could choose the one he liked best. There were toys also for the smaller children, suitable gifts for the men and women and boxes of candy for everyone. At this time one of our patients was suddenly taken away from his wife and two little children. He had tuberculosis and was sent to an institution. Before he left he told me that he did not mind his suffering at all, but he was thinking of the cheerless Christmas that confronted his wife and children. However, it was not so cheerless as he expected it to be. A friend of mine supplied them with a turkey, and our Santa Claus did the rest. You never saw such a happy family. We were doubly repaid for our labor of love because at the time every patient responded to the treatment. Some were cured before Christmas time, but they were invited to come and share in the Christmas cheer just the same. Many of them came.

Something happened which was not at all expected nor planned. The son of a multi-millionaire, who was being treated by Dr. Bates at this time, came at his appointed hour. He stood and looked at the tree with great approval. It was aglow with colored electric lights. Then he spied the toys and shouted with joy. All of a sudden he disappeared. He was found later with Dr. Bates, asking the doctor questions that had nothing to do with the treatment of his eyes. Some of his questions were:

"Which toy is mine, doctor? Can I have the one I like best? Did Santa really leave this one or that one for me?"

His aunt, who was with him, was mortified. She made all sorts of apologies, imploring the doctor not to listen to him. "Why," said she, "He has money in his pocket now, to spend as he sees fit."

The doctor apparently paid no attention to her. His eyes were fixed on the little rich boy, who could

appreciate a toy meant for a poor little lad. Dr. Bates informed him that the clinic Santa Claus would be pleased to have him select the toy he liked best, for we really had more than enough to go around.

There were fishing ponds, and mechanical boxers, supposed to be Jack Dempsey and his opponent. The latter was a great delight to the little fellow, so we did not have to guess which one he wanted.

A dear old man from the Blind Man's Home was very grateful for a package given him by a private patient.

One little girl, after she had chosen her dolly, said she didn't know that Santa Claus loved her so much.

I want to thank my friends who made all this possible, and to wish that their every Christmas be a merry one.

### **CHRISTMAS, 1924**

We had a lively time at the clinic last Christmas season, 1924. Many poor souls were made happy at that time, because of the generous contributions received throughout the year for the clinic fund.

I still keep up the old custom of telling a Christmas story to my younger patients. Every time they come for treatment, I tell them to palm their eyes, and then I try to improve their memory and imagination, which always improves their sight. It is necessary to remind a child of pleasant things, and what is more wonderful to the child mind than a Christmas tree laden with toys and candies? While I am treating boys and girls at the age of twelve or older, I talk about ice skating or sleigh rides, hills of snow, the pure whiteness of the drifts, or I tell them to imagine they are making snow balls. This helps to improve their vision for the test card and relieves tension or pain. Young men and women who work in shops usually find it a benefit to imagine that objects about them are moving all day. I tell them to blink slowly, but constantly, and shift their eyes while blinking. This stops the stare which causes so much body fatigue.

If I have had a hard day, treating the most difficult cases, I find it a great help to palm and remember some of my childhood days. I think back to the night before Christmas. Mothers will find it a great help in improving their own sight if they make a daily habit of spending ten or fifteen minutes with their children, palming and resting. Children can easily form mental pictures while palming, especially remembering the Christmas decorations in store windows, the funny mechanical toys, and animals that move about when they are wound up. Recalling or imagining such things, while their eyes are closed, helps to relieve the mind of school studies, which sometimes cause strain. Adults, especially mothers, listen to me while I am describing such things to the children in the clinic. When it comes time to treat the older patients, I find it quite easy to have them remember how surprised their children were on Christmas morning, when the tree and toys were discovered.

It was necessary to find out the ages of the children so that we could purchase suitable and useful gifts for them. There were sewing baskets for the older girls, and handkerchiefs, three in a box, for mothers and fathers. For the little girls, we had the dearest dollies which we purchased at a reasonable price. Little boys received games and toys of all sorts, and enough money was given to a mother to buy a pair of baby shoes for her youngest.

One mother, who came quite regularly for several months before Christmas, was made very happy the day of our festival. She was invited to bring all of her children. There were seven and not one boy among them.

Dear old Pop from the Blind Men's Home of Brooklyn, was too feeble to be with us, but we remembered him just the same. Good smoking tobacco and some wearing apparel were sent to him and he was overjoyed.

While we were distributing the gifts, I suddenly remembered about the little rich boy who enjoyed a poor boy's gift the year before. I was a little sorry not to have another rich boy at this time. There were a few toys left, and no more boys to receive them. The last little girl had received her doll and departed. There was one doll left behind. She was perched among the lower branches and looked rather lonesome. There was no one to claim her. I was rearranging the lights on the tree while all was quiet. When I turned away from the tree, I saw a little rich girl from the West, admiring the lonesome dollie. Her mother stood behind her wondering what would happen next. Dr. Bates also appeared on the scene, and when he nodded his head toward the little girl and then the doll, I understood what he meant. Both arms of the little girl reached out for a poor girl's gift. She held that dollie as though it were the only one in the world. I have learned so much about private and clinic patients, and I am glad to find that all boys and girls feel the same whether they are rich or poor, their hearts beat alike at

Christmas time.

Many thanks to my friends who make our clinic family happy at Christmas time.

## **CHAPTER II**

### **MYOPIA OR NEAR-SIGHT**

#### **THE AMBULANCE DRIVER**

ONE of the ambulance drivers connected with the Harlem Hospital called on us. He was wearing very heavy glasses and his eyes, as he strained hard to see, looked to be about the size of pinheads. He had heard of Dr. Bates and his treatment, and was eager to obtain some relief from eyestrain. Oculists told him that nothing more could possibly be done for him. His sight was gradually failing, and he feared that he would soon lose his position. Dr. Bates examined his eyes, and told him that he had a very high degree of myopia, but that he could be cured if he would take the trouble.

Our room never was so crowded with patients as it was that day, and he had to wait some time before receiving any attention. However, while I was busy with a boy, who enjoyed palming because it improved his sight so quickly, the ambulance driver got busy too. Shifting and swinging helped little Jack, and he found that it was a great relief to try the different methods which helped him to relax. This interested the man very much, as the smile on his face indicated. I was eager to help him, too, and glad when the opportunity came. He stood directly behind my boy patient, and imitated as well as he could just what Jack was doing.

When he first entered the room, his vision was 10/200 without glasses. Before I had a chance to treat him, he had improved his sight to 10/70 all by himself. He listened while I continually repeated to the boy, not to stare. When I told the little fellow to look no longer than a second at one letter, because if he did his sight would blur, the man followed the directions. When I began to treat the latter he told me that he never knew he stared. He found out that when he did not close his eyes often, as the normal eye does, his vision blurred, and he could not see any letters at all on the test card at ten feet. That day I improved his sight to 10/40.

#### **OTHER CASES OF MYOPIA**

We have had a number of patients who were cured of myopia in one or two visits. Since some were not bad cases, it did not take long to cure them.

A woman of middle age, who had worn glasses two years, told me something, which I think might interest our readers. She had very little to do at the time; to amuse herself, she would stare at an object until it became distorted. She stared so persistently that the object became two instead of one. Later she was able to see the object triple, and to anyone who would listen to her she boasted about her ability to do this. Then, one morning, after she awakened from a sound sleep, she could not see the hands of her clock. The figures were blurred. Everything in the room seemed to be covered with a veil. She tried her usual experiment and stared just as hard as she could, thinking that it would help her to see things clearly. Instead, her vision became worse, and she called on an oculist. He told her that she would probably have to wear glasses for the rest of her life. He fitted her with glasses and advised her never to be without them. Six months later she had to have stronger lenses. When I first saw this patient, I thought that her eyelids were stationary. I looked at her for fully three minutes, without seeing her blink once. Then she told me what I have already written. I said I believed that she had brought on all this trouble herself. She surprised me by saying: "Well, if I could make so much trouble with my eyes, surely I can undo it with your help."

She did exactly what I told her to do, and more. She practiced conscientiously, and she never talked about her eyes to anyone until she was cured. She palmed for an hour every morning, from six until seven o'clock. She traveled morning and night for one hour on a railroad train, and never opened her eyes the whole time. Her friends did not trouble her after she asked them not to speak about her eyes. She practiced whenever she had time, with a newspaper or book type. She worked with a typewriter every day, and found that her memory helped in her work.

Sometimes she remembered a large, white imitation pearl of her earring, or she would remember the sparkle of a little diamond in her ring. A black period was out of the question entirely. If I mentioned a period to her, she would begin to stare. She said it reminded her of the blurry things she saw when her eyes first troubled her. She surely demonstrated that to remember an error is a strain.

Six weeks after I first treated her, she was cured without glasses. She now sees things clearly at the distance, but only when she blinks, which is just what the normal eye must do to keep the vision normal. Her friends have a good time with her, when she is in the mood, for she is constantly reminding them to blink.

A young man had worn glasses steadily for ten years. With his glasses on he read 10/15, and without them 10/30. His face became distorted as he tried to read the letters of the test card. He complained that the white of the card was a dazzling white, and gave him great pain when he made an effort. After palming for a few minutes, the wrinkles temporarily disappeared. I placed him in the sun, and as he looked down, I raised his upper eyelid, and focused the bright rays of the sun on the white part of each eye with the sun-glass. This took but a minute. We returned to the test card, and without a mistake, he read every letter. I told him to sit in the sun as much as possible, and let it shine on his closed eyelids, and to palm every day at intervals for at least an hour.

He never came back for another test, and I hope his cure was permanent.

A little girl, nine years old, who was quite near-sighted, had very poor sight even with her glasses on. I was told that while her vision was bad before she had put on glasses, her eyes had become much worse during the last year. She had worn them only one year, and I believe that they made her worse. The first day her vision without glasses was 7/200 with both eyes, and with each eye separately. I told her she would have to stop wearing glasses if she wanted to be cured. The child was afraid to do that, because her school teacher told her she should always wear them. Of course I became less enthusiastic about the cure of her eyes.

I gave her a treatment that day and improved her vision to 7/70 by having her palm for ten minutes or so, and then look at a letter on the test card at which I was pointing. I did not expect to see her again at the clinic, because she was disregarding my wishes by wearing her glasses, but she was there the next clinic day, holding her glasses in her hand. She said she had worn them every day only during school hours. At other times, after her home-work was finished, she practiced with the test card and palmed her eyes as much as possible.

I was surprised to find that her vision had improved even though she wore her glasses. Dr. Bates and I have been surprised more than once to find a patient get well, although they had worn their glasses for emergencies. This little girl attended the clinic four times, and her vision improved to 8/40.

### **PROGRESSIVE MYOPIA**

One of the worst cases of progressive myopia I have had was that of a girl aged twenty-three. The glasses she wore were so thick, that her eyes appeared to be very small. In Philadelphia, where she lived, Dr. Bates' book, "Perfect Sight Without Glasses," is quite popular. It was through a friend who had the book that she heard of Dr. Bates. She was her mother's only support, which made it very hard for her to leave a good position as typist. She had come to our city mainly, to see Dr. Bates, who, she was sure, could cure her eyes after others had failed.

Being poor, Yetta could not afford to come for private treatment, so she came to the clinic. The clerk at the desk informed her that she could not receive treatment because she did not live in the district of the hospital. She was admitted that day, however, for just one treatment, and the privilege of an examination. Dr. Bates examined her eyes and said that her trouble was progressive myopia in a very severe form. He asked me what could be done, in order that we might treat her at the clinic. When a severe case like this comes to us, I long for a Bates Institute. I asked the girl if she could establish a residence near the clinic, so that we could treat her, and she agreed to try.

Yetta's vision without glasses was 2/200. I improved this the first day to 2/100, which was double what she had before. Her case required more time than I could give her, so she was instructed to palm her eyes for long periods all through the day in her room, and also in the evening, and to come just as soon as she could. She was told never to wear her glasses again. What a shock this was to her! How could she possibly get through the streets without them, she asked. I told her I could not undertake the task of trying to improve her vision unless she did so. I knew the hardships she would go through

without her glasses, and I was sorry. As she left the room, I could see how helpless she was, but before she reached the end of the corridor, on went her glasses again. She had lost her courage very quickly, but I did not lose faith in her. Any girl who would leave her mother, home, and position, to have her eyes cured, would not give up altogether, even though she was tempted to put on her glasses again. Two days later she returned, and displayed her admittance card, showing that she now lived in the vicinity. Yetta was anxious for me to know that she had obtained a position as an attendant where she also had a home. She told me that she had broken her glasses. This was the best thing that could have happened, because I knew she would be all the more determined to be cured.

This time I placed the test card three feet from her eyes, and all she could see was the 200 line letter. The short swing, and blinking helped her, and in a few minutes her vision improved to 3/100. She came every clinic day, and was always ahead of time. Her progress was slow but sure, and her face, which looked all the world like a stone image with slits for eyes, now had a natural appearance.

She enjoyed the movies for the first time in her life, and was happy because she could go along the streets without fear of an accident. At a later visit, she flashed letters on the ten line of the test card at ten feet. She asked me if I went to church. The question was rather unexpected, but I told her I attended church, and was proud of the fact. I consider the clinic my church also. Hundreds of poor souls entered our room there, just craving for a kind word or two. The Jewish people stood beside the colored folks, the Germans with the Irish, Spaniards with Italians. Some were Catholic, others Protestant. Many other kinds of religions were represented, but the one God was worshipped by us all. A kind word and a smile were necessary, so we gave them to our patients in abundance. The Jewish girl explained that the reason for asking me the question, was that she had noticed that the kindly feeling which exists in most churches, also prevails in our clinic.

### **CURED IN ONE VISIT**

While our clinic now is not so large as it was at the Harlem Hospital, we have very interesting cases, and many of them are school children.

A little chap, aged seven, was one of my bright boys. His father was a carpenter who helped make the partitions in our office. We were treating patients long before our present office building was completed. He, therefore, had the opportunity to see some of the patients as they came to our clinic, and also when they left the office after their first treatment. He remarked that some cases appeared so much improved after only one treatment that it seemed as though a miracle had been performed. Since he was poor, I offered to help him or any of his family, if they should ever need treatment for their eyes.

"Oh!" he said, "I have two little boys, but there is nothing wrong with their eyes."

On April 12, 1924, just a year after I had spoken to him, his son, Frederick, came with his mother. While I was talking he was very attentive and his big blue eyes looked into mine. I think he was speculating whether I was all right or not. He seemed to feel at home with me right from the start so I had no difficulty in improving his vision. His mother told me that the school nurse had sent him home with a note saying that he needed glasses. His father refused to get them and suggested that the mother bring him to me. As Frederick answered my questions, he looked directly at me, and there was no sign of a frown or strain of any kind, but I did notice that he listened without blinking for two minutes or longer. As the normal eye blinks unconsciously every few seconds, I soon realized what his trouble was, and that he could be cured in a short time. Dr. Bates examined him with the ophthalmoscope and said there was nothing organically wrong with his eyes, merely eyestrain.

Since the letter test card troubled him at first, I had him read the card with E's pointing in different directions. As he looked at the card, his facial expression changed entirely. His forehead was a mass of wrinkles as he tried to see in what direction the E's were pointing. His vision with both eyes was 10/20. He read 10/20 with the right eye, and 10/30 with the left. I left him for half an hour after I had told him to palm and to be sure not to open his eyes until I said so. When I returned to him, I tested his vision again, and he read 10/10 with each eye separately. He blinked after seeing each letter, with no sign of a wrinkle or change in his face. His mother purchased a test card and promised to help him every day at home, before and after school. She was told to bring Frederick to the clinic again in a few weeks.

On May 3, 1924, I saw him again and he appeared very happy. His mother proudly told me that his report card showed the highest marks in all his school work. I wondered why Frederick did not look toward his mother while she was praising him. I did not have to wait long, however, to learn the reason. She had warned him before they arrived that she would tell me how careless he was with his stockings,

and he did not wish me to know. Yes, Frederick had only one fault, said his mother,—making holes in the knees of his stockings. Of course, I said, this was a terrible crime but putting glasses on him would have been a worse crime.

Frederick gained a point when his mother smiled on him. The school nurse who had ordered him to get glasses noticed that Frederick did not frown any more. He could see the blackboard at any distance without trouble. The little fellow had been cured in one visit.

**(Dr. Bates uses the word "Squint" to refer to Crossed and Wandering Eyes.)**

### CHAPTER III

#### SQUINT OR CROSS EYES

#### SQUINT - Case No. 1

A LITTLE mulatto boy, aged four years, was the most unruly youngster who ever came for treatment. While testing his sight with the test card, I had a most trying time. When he tried to look straight ahead, his right eye turned in so far that one could hardly see the iris. His young grandmother, who came with him, expressed deep sympathy for me and assured me that I would have a hard time trying to manage him or to help him. I asked him his name several times before he answered:

"I ain't got no name."

Later he said it was Francisco, Frisco for short. Frisky would have suited him much better. I could see that he was straining and was extremely nervous. I decided to be very patient with him, but for some time the only answers I could get from him were: "I don't wanna" and "I won't."

All sorts of apologies came from his grandmother, but I assured her that I was not discouraged with him. I made up my mind to help the little chap, and in some way relieve him of that awful tension and nervous strain, which I felt was the cause of all his devilishness. Finally I said to him:

"If I had a bad eye and a good eye, I would not make my good eye do all the work. I would make the bad eye work hard so that I could see better."

This interested the child, and he asked: "Have I got a bad eye?"

"Yes," I said, "and the reason it is bad is because it is lazy, and you won't let it be good. All you can say when I try to tell you how to make it behave is, 'I don't wanna.' Nice boys with good eyes don't say that." Thereupon he shouted in a loud voice which startled the rest of the patients: "Make my bad eye do some work; I want good eyes like you have."

I immediately showed him a test card called pot hooks. Little folks at the age of two or older like this card because all they have to do is to point a finger up or down, left or right, whichever way the E may be pointing. When they cannot see the way the E is arranged, then we have them cover their eyes just as grown-ups do, to obtain relaxation; only we pretend to play hide and seek. As I held the card two feet away I covered his left eye with the palm of my hand, and asked him to show me how the E's were pointing. At that distance he was able to see the 100 line letters. He could see straight ahead with the right eye only just long enough to see those letters; then his eye turned in again.

At first I could not induce him to palm, so I told him to close his eyes as though he were sleeping. He was very obedient about doing this, and his grandmother stood by in astonishment while his eyes were closed. I praised him for closing and resting them, and I said if he would do this many, many times every day, his right eye would become straight like the left and would not be bad any more. Then I told him to cover his left eye with his hand and look at the card, which I had fastened on the wall five feet away. This amused him, and he acted as though he were in for a good time. I told him to look at the 200 line letter, and then quickly close his eyes; then to look at the 100 line letters and close his eyes quickly again. In this way, Frisco did not have a chance to strain, because his eyes were not open long enough at any one time to stare. He was able to see these letters as well at five feet as he did at two, and this encouraged me. When he opened his eyes a third time he showed me with his hand how the next line of letter E's pointed.

He attended regularly three days a week for a few months, and was always very obedient. Each time he came he was able to keep his eye straight, not only while practicing with the card, but also while talking to me. His sight improved at each visit. His grandmother purchased a Snellen Test Card and assisted with the treatment faithfully at home. Six months later he was able to read the ten line letters

at ten feet away with each eye, and had learned to read the alphabet and first grade words.

I did not hear from Frisco for a year or so, when one day he and his grandmother surprised me. Dr. Bates and I had just arrived and found a large group of patients waiting. From among this group I saw a pretty mulatto woman, stretching her head above the rest, smiling at me. Her eyes were dancing and she seemed eager to talk to me. Standing beside her was a little chap. I did not recognize my little Frisco of a year ago,—he looked so different. His large beautiful eyes, now perfectly straight, gazed into mine, and he smiled as he noticed that I had finally remembered who he was.

His grandmother then said: "I have come especially to thank you for what you have done for our boy. When we first came to see you, no one in the world wanted him but me. He was so disobedient to his mother and so cruel to his baby sister. He would hurt and destroy everything he touched, and my daughter and I feared that he would grow up a criminal. Since his eye became straight he is a quiet, lovable boy and he is now living at home with his mother and father."

Then I greeted Frisco and he made a gentle little bow to me saying that it was a pleasure to see me again. I thought that was a fine little speech, as he was only five years old. Grandma said I had transformed him, but I assured her that it was her love and her untiring efforts to help in the cure of his eyes that had made the great change in him. Frisco's last words to me were; "I love baby sister now. I don't pinch her any more. I just kiss her."

### **SQUINT - Case No. 2**

Doris and Arthur were cousins. Both had convergent squint. The only difference between them was that Doris's right eye turned in, while Arthur's trouble was with the left eye.

Doris was four years old when she was brought to us. At the age of two it was noticed that her right eye turned in. Although glasses were immediately obtained for her, they did not correct her squint. When I first saw her, the vision of the squinting eye was 10/40, while that of the other eye was 10/20. Later, the sight of each eye became 12/10.

Doris did not know the alphabet; so in treating her I had to use a card covered with the letter E arranged in different ways, and she was able to tell me in which direction they were pointing, left, right, up or down. I found it rather hard at first to get her to palm for any length of time. One day the mother told me of a dear baby brother at home, and I told Doris to think of her brother when she closed and covered her eyes. She very willingly did this and kept perfectly still. When she thought it time to open her eyes, usually after a minute or so, she called out questioningly, "open them?" If I answered, "No," she would keep them closed until I said, "Ready." During the first few treatments the right eye would not keep straight for more than half a minute, but later it stayed straight all the time, while she read the chart down to the ten line. In the beginning after a treatment it turned in again, but not so badly as before, and if she was reminded to make it look straight she could do so very readily.

The child's mother was a great help in the treatment, both at home and at the clinic. She derived much good from the treatment herself. She was a most unselfish parent, absolutely devoted to her children; but this devotion caused her to get excited and nervous, so that when she arrived at the clinic her eyes were staring almost out of her head. She soon became able to relax and the condition of her eyes improved.

Arthur's left eye turned in. His vision for the test card was right 10/20, left 10/50. His age was twelve years. His mother wanted me to know that he was a very bright boy, obedient and lovable. When he looked at the chart it was sad to see the left eye turn in until the iris was almost hidden. Arthur was quite different in many ways from any child I had ever treated for squint. All the rest showed signs of nervousness or were cross and dissatisfied. But not so with Arthur. He always did as I told him and his lovable face always wore a smile. He made rapid progress and his mother, who came with him, was very happy over the good results obtained in a very short while. At his first visit, after reading a line of letters on the chart, he was told to remember the last letter while he closed and covered his eyes. When he looked at the card again he was able to read another line. His vision became normal, 10/10, in just six weeks' time and his left eye no longer turned in. His mother told me that he got on much better at school than he did formerly. He did his exercises daily because he was eager to get well.

At Christmas time unusual gratitude was shown by the mothers to both the Doctor and me, because their children had obtained normal vision.

### SQUINT - Case No. 3

Another patient had been wearing glasses for twelve years for the correction of squint, but was not benefited. When she began wearing them her mother tried to console her by saying that perhaps in another year the squint would be cured; but instead it only got worse. Her playmates made unkind remarks about it, and when she found her sight was getting worse for reading she became utterly discouraged.

I tested her sight, and she read 15/40 with her left, or better eye. When I asked her to read the card with her squinting eye she turned her head half way round to the left in trying to see. The vision of her right eye was 15/70. She was told to palm, and her mother was astonished when in a few minutes she opened her eyes, and, with her head perfectly straight, read 15/40 with her right eye without a mistake. When palming is done right it improves squint very quickly. Two days later, she read 15/15 with each eye separately, and her right eye was perfectly straight. She had followed my instructions to palm at least six times a day for as long a period as was comfortable for her. Three days later she came to the clinic smiling and expressed her gratitude for what had been done for her.

"I can read a book for hours at a time," she said, "without headaches or discomfort. I visited another clinic where I had received treatment and asked the doctor who had treated me to let me show him what I could do. I showed him how I could palm, and then I read the test card for him with each eye separately. The doctor said it was remarkable, because he had told me that I could never again get along without glasses and to be sure to have them changed every year or so."

After six months her vision was still normal.

### SQUINT - Case No. 4

Cross eyes are indeed an affliction. This was plainly shown by the look of disgust which appeared on the face of the young colored mother who brought her nine year old boy to me for treatment. He had the most wistful expression. He kept looking up into his mother's face and his actions were that of a deaf and dumb person. When he looked at his mother with his right eye, the left eye turned out. When he looked at her with his left eye, the right eye turned out. He had alternate divergent squint. My heart went out to James, as his mother related to me the fact that her other three children had normal sight, while James looked so repulsive with his crooked eyes. A chill went through me when I heard her say, "I wish he had never been born." Then with more disgust in the sound of her voice she said, "I can't help it, but I hate him." Can anyone imagine a mother disliking her own child so much? All because his eyes were crooked. Complaints came to her from the school he attended. His teacher declared that he was stupid.

All this time the little fellow looked up at his mother apparently without moving an eyelid. Her question was, "What can be done with him or for him? Can you give him glasses or operate to cure his eyes?" I told her that glasses would never cure his squint, and neither would an operation. I asked her to watch carefully, and see what James was about to do for me.

First, I held him very close to me and patted his woolly head. He pressed a little closer. He liked the beginning of his treatment. I told him to say the alphabet for me, but he could not remember all the letters. He stood ten feet from the test card. I asked him to read, starting with the largest letter at the top. He read a few letters correctly, but I soon found out that he did not know many letters. His mother remarked: "The teacher in school thought his mind was affected because of his eyes, and that there was little hope of curing him." I had my doubts about the teacher saying such a thing, but I did not say so to the mother. What a pity it was to have the dear little fellow hear all this,—he looked so worried and restless. Perhaps he wanted to run away somewhere because his eyes caused others so much trouble.

I taught him to palm, telling him to remember a small Bible-class pin I was wearing on my dress. In a few minutes I tested his sight with the E card, which is used in cases where children do not know their letters. At ten feet he saw the fifty line. Again I told him to palm, and asked his mother not to speak to him while he was resting his eyes. In the meantime I attended to other patients. After a few moments I glanced at him and saw two big tears rolling down each cheek. He was weeping silently. His mother was just about ready to find fault with him, but I intervened and led her gently out of the room to a bench outside the door. I whispered to James that I loved him a whole lot, and if he would learn to read his letters at home and could read half of the test card correctly the next time he came, I would give him a nickel. I saw him smile, and when I was able to treat him again, I found that his sight had improved to the forty line of the E card. I have been wondering ever since, whether it was the mental picture of the



Bible-class pin on my dress which he was asked to remember, or the clear vision he had of that nickel I had promised him, that improved his sight for the forty line of letters.

Two days later James appeared again with his mother, and both were smiling. He could hardly wait to tell me that he knew his letters perfectly. His big brother had taught him at home, and he hoped I would be as pleased as his teacher was, when he read all his letters on the blackboard for her that day.

It was amusing to see James looking toward my purse which was hanging on the wall in the clinic room. I produced a strange test card which he had not seen. When he began to read the card I placed him fifteen feet away, which was five feet further than the first day. He was so excited that his squint became worse and he could not read. Dr. Bates saw this, and said that his trouble was mostly nervousness. I told James to palm again, and reminded him of the letter E with its straight line at the top and to the left, with an opening to the right. Then he became able to see the letters after a few moments' rest. I called Dr. Bates' attention to the sudden improvement in his eyes as he read one line after another, until he reached the thirty line, when suddenly his eyes turned out again, but after he had rested his eyes they became straight. I gave him the promised nickel that day, and made him very happy.

After he had been coming to the clinic for a month, James was able to keep his eyes straight most of the time. The attitude of his mother toward him was decidedly better and she promised to help him with the treatment of his eyes at home.

### SQUINT - Case No. 5

As I entered the clinic one afternoon I saw two mothers standing side by side, each holding a little boy by the hand. The children were both about the same age, five years, and both were cross-eyed; but there the resemblance ceased. One seemed happy and contented, and it was quite evident that he was much loved and well-cared for. Both mother and child were clean and neat, and often the boy would look at the mother for a smile, which was always there. The other boy was plainly unhappy and neglected. I could read the mind of the mother, who was anything but clean, as she stood there grasping his hand a little too tightly. Even without her frequent whispered threats of dire things to happen if the child did not keep still, I should have known that she considered him a nuisance, and not a precious possession as the other boy plainly was in the eyes of his mother.

I was at a loss to know which child to treat first, but decided upon Nathan, the clean one, and tried to keep the other interested while he waited. Nathan had beautiful black curls, and would have been pretty but for the convergent squint of his right eye, which gave him a peculiar appearance. His vision was very poor. With both eyes together he could read at ten feet the fifty line of the test card, and with the squinting eye he read the seventy line. I showed him how to palm, and while he was doing so I had time to talk to his mother. She said that his right eye had turned in since he was two years old and that all the doctors to whom she had taken him had prescribed glasses. These, however, had not helped him. I asked Nathan to read the card again, and was delighted to find that the vision of the bad eye had become equal to that of the good one, namely 10/50. **I had difficulty in keeping his head straight while I was testing him, for like most children with cross eyes he tried to improve his sight by looking at the object of vision from all sorts of angles. After he had palmed for a sufficient length of time, however, he became able to correct this habit.** The extraordinary sympathy which existed between mother and child became more apparent during the treatment, for no matter what I said or did the child would not smile until the mother smiled.

Nathan came to the clinic very regularly for a year, and for the first six months he always wore a black patch over his left, or better eye. Atropine was also put in this eye to prevent its use in case the patch was not worn constantly. Nathan did not like the patch, and his mother had to promise all sorts of things to keep it on. After it was removed the atropine was continued. Dr. Bates had told me what to expect when the patch was removed, and so I was not shocked to see the good eye turn in. I knew the condition would be temporary, and that in time both eyes would be straight. Treatment was continued for six months, and then the boy became able to read 15/10 with both eyes, and always with both eyes straight.

The other little boy, to whom we must now return, was called George, and his condition was worse than that of Nathan, for both his eyes seemed crossed. At ten feet he read the fifty line, but complained that he saw double. I showed him how to palm, and while he was doing so his mother told me how very bad he was, adding that I must spank him if he did not mind me.

"I think he gets enough of that already," I said, but I was careful to say it with a smile, fearing that

she might lose her temper and say more than I would like.

George had been palming five minutes, when I asked him to uncover his eyes and look at the card. He was much surprised to find that he could read the forty line without seeing the letters double. I asked his mother to be a little patient with him and help him at home, and I gave her a test card for him to practice with.

"Madam," she replied, "I am the mother of six, and I haven't time to fuss with him."

"No wonder the kiddie is cross-eyed," I thought, and seeing I could get no help in that quarter, I appealed to George.

It was near Christmas time and when I revealed to him the possibility of a Christmas present if he came to the clinic regularly, and did what I told him, he became interested. I did not know how much could be done for his eyes in the eight weeks that remained before the holidays, but I felt sure that with his co-operation we could at least make a good start. This he gave me in full measure. Never did I have a more enthusiastic patient. He attended the clinic regularly three days a week, and often when I came late I would find him waiting with other boys for me on the hospital steps.

After he had been practicing faithfully for two weeks, palming six times a day, and perhaps more, according to his own report he was able to keep his eyes straight while he read all of the test card at ten feet. When he had done this I asked him to spell a word with four letters, and instantly his eyes turned. I had him palm again, and then I asked him to count up to twenty. His eyes remained straight, because he could do this without strain.

Two days before Christmas, George was at the clinic bright and early, and with him had come three of his brothers to get their share also, "if there were any presents left," as George explained. Fortunately a little fairy had prepared me for such an emergency, and I had gifts for everyone. That day George was able to keep his eyes straight both before and after treatment, and to read 10/10 with each eye separately.

The third case of squint was little Ruth, aged three. Dr. Bates suggested to her mother, who was nearsighted, that she should have her own eyes cured, because her condition had a bad effect on the child. She consented, and soon obtained normal vision. Ruth was so tiny that I had to put her on a table to treat her. As she could not, of course, read the letters on the test card, I held before her a card covered with E's of various sizes turned in different directions. Her mother was quite positive that she couldn't understand what I wanted her to do, but Ruth, as often happens in such cases, had more intelligence than her mother gave her credit for.

I asked the child to tell me whether a certain E pointed upward, or to the right or left, by merely indicating the direction with her finger, and it did not take an instant for her to show her mother how bright she was. I showed her how to palm, and in a little while she indicated correctly the direction of the letters on several lines. When the letters grew indistinct, as I moved the card further away, she became excited and wanted to cry, and her left eye turned in markedly. She palmed again and while she was doing so, I asked her all about her dolly, whether her eyes were blue, or some other color, and what kind of clothes she wore. When she removed her hands from her eyes, both were straight.

Her mother was instructed to practice with Ruth many times a day at short intervals, so that she would not tire of it. Each time I tested her sight her eyes remained straight. I was much interested to learn from her mother that if Ruth's daddy raised his voice in the slightest degree when he spoke to her, her eyes were sure to turn in. This merely confirmed my own experience that it is necessary to treat children who have defects of vision with the utmost gentleness if one wants to cure them. Ruth came to us for about nine months altogether and when I last saw her, both eyes were straight.

## **CHAPTER IV**

### **EYESTRAIN**

#### **PALMING**

EYESTRAIN is very common among school children. The only remedy offered for the last hundred years or more has been glasses. An Italian boy was sent to us by his teacher to be fitted with glasses. Dr. Bates examined his eyes with the retinoscope and said he was only suffering from eyestrain.

I tested his sight with the test card and then told his mother, who accompanied him, that he could be cured without glasses. This interested her greatly. She had wonderful sight herself, for she could read the smallest letters on the card at more than fifteen feet. I gave her doctor's diamond type card, which

she read, with perfect ease, at four inches and also at twelve inches from her eyes.

She told me that her age was thirty-eight and that she was the mother of ten children. With a great deal of pride, she said that they were all born in this country, and that they were all alive, too. Here was a real mother, I thought, proud of her big family. I enjoyed hearing her talk and encouraged her to do so. Like many of her race and sex, she had beautiful teeth and smooth olive skin. Although she was poor, her clothes were neat and clean, and Joseph was just as neatly dressed as she was. She looked at him smilingly and said: "Think of it, Joey, you don't have to wear glasses." Before this little talk Joseph seemed scared to death, as if something terrible were going to happen to him, but when his mother began to show confidence in me, he smiled and looked happy, as all normal boys do.

Both watched me very closely as I explained the method of palming to them. By palming is meant to close the eyes and cover them with either one hand or both and shut out all light; then to think of something that has been seen perfectly, or clearly, something pleasant such as a flower, a sunset, or a white cloud in a blue sky, and let the mind drift from one pleasant thought to another. Boys like to remember a baseball while palming. Little girls like to think of their dollies. Mothers like to remember the color of their babies' eyes. When palming is done correctly it relaxes the mind and body and relieves eye strain.

At fifteen feet Joseph read the fifty line before palming. After palming ten minutes, he obtained normal sight that day. When he read the card with each eye separately his left eye seemed to be the better of the two, because he made a few mistakes in reading the ten line letters with his right eye. He was encouraged to palm again for a few minutes, and then he became able to read 15/10 just as well with his right eye as he could with the left.

His mother stood where she could see all this, and beamed with happiness as she saw her little boy's sight improve. I started to explain to her the necessity of Joseph's resting his eyes as soon as he wakened in the morning, because he might have strained his eyes during sleep, also to rest his eyes again at noon, after school, and before bedtime. She listened very attentively and then she said: "Maybe you think you tell me something new, but I don't think so. All the time when I nurse my babies, I put up my one hand to my eyes as I close them, and I keep quiet while my baby is nursing. Then my baby goes to sleep quicker and easier and I am rested too." Surprised, I asked her who taught her to do this, and she answered, "Why, nobody did, I found that out myself." She was thankful, however, that Joseph did not have to wear glasses, and promised to help him every day until his eyestrain was entirely relieved.

She returned a week later with a good report of his progress. The test card I gave him for home treatment was used by the whole family. His mother tested the sight of all her children and found that two of her little girls also had eyestrain. She taught them to palm and cured them herself. Here was a busy mother with ten American citizens to help support and educate, and yet she found time to teach them how to obtain normal sight. I saw Joseph and his mother but twice, but he had suffered no relapse, nor did any complaint regarding his eyes come from the school which he attended.

The last time I saw the boy, he was anxious for me to know that his father, who had no trouble with his eyes at all, came home from his work one evening and thought the family were all playing peek-a-boo with him. The mother had them all busy palming, which was a strange sight to him.

Most people, like myself, have not the time to palm daily. However, if I suffer from eyestrain, which sometimes happens after a strenuous day, I find the memory of palming is all that I need to obtain relaxation. The memory swing, which Dr. Bates explained in one of our "Better Eyesight" magazines, has helped a great many patients. So it is with the memory of palming. In other words, remember how relaxed you were, and how free from strain the last time you were able to palm successfully, and this will help you through the day while at work, or at the theatre, or any place where it is impossible to place the palms of your hands over your eyes.

### **CONCENTRATION IS BAD**

Almost all the patients who come to us at the clinic, and especially adults, think it necessary to concentrate in order to see more clearly. They regard concentration as part of our method of treatment, and until they learn better I cannot make any progress with them.

A young girl of eighteen or nineteen years of age had worn glasses for seven years, and had consulted oculists and opticians without getting any relief from the pain in her eyes. With her glasses her vision was 15/20, and without them 15/50 with each eye. She was unable to read fine print without

glasses. When she closed her eyes I noticed a twitching of her eyelids. She was told to open her eyes and look at a letter on the card, then to close them and remember the blackness of the letter, thinking first of the bottom and then of the top, alternately. When a few minutes later she removed her hands from her eyes she could not see the letter which she had seen before.

I wondered why her sight did not improve, but I understood when she said: "I did what you asked me to do. You told me to remember the letter O, I concentrated and held on to it and tried hard not to remember anything else. But now my pain is worse than before."

"You did not understand me," I said. "I did not wish you to hold on to the letter O, I asked you to remember the blackness of it, and see or imagine one part best at a time."

She tried again, covering her eyes with her hands, and I said to her: "Remember the letter O as you saw it, but first remember the top. Now what happens to the bottom?"

"It fades from black to gray," she said.

"Now remember the bottom blacker than the top."

"The same thing happens to the top," she said. "It fades to a gray color." Then she added: "Please let me keep doing this for a while, it seems to take my pain away."

In a few minutes I had to ask her to remove her hands from her eyes, as I could not spend any more time with her, and I wanted to know if I had helped her. When she looked at the card again, she saw the O very plainly, and also read two more lines, the forty and the thirty. The twitching of her eyelids had ceased, and she smiled.

The patient came regularly and after three visits she read the ten line at fifteen feet. She became able to read diamond type at eight inches from her eyes. But when I held the type at six inches and asked her to fix her eyes on one corner of the card and stare at it, the whole surface became a blank. The pain in her head and eyes returned. Sometime later this girl wrote me a letter of gratitude thanking me for curing her. At the end of her letter was a postscript: "Now I know why a school for concentration failed. They were all wrong."

One day a little Irish mother came with her boy of eleven, who had terrible pain. Dr. Bates and I both listened to her story, the gist of which was:

"The school nurse siz me boy needs glasses. Tis trouble he's having wid his eyes."

The boy constantly kept his eyes covered with a white cloth, and at first glance I thought he was crying, because the part of his face that I was able to see was much flushed. Dr. Bates examined his eyes with the retinoscope and then told me I could cure him very quickly, as he had no organic trouble. Then his mother began to talk again.

"Oi haven't any time to be foolin' 'round here, ma'am," she informed me. "Oi got to git back to me washin'. It's glasses he needs, ma'am, I tell ye."

When she finally stopped for want of breath, I said: "Now wouldn't it be fine and dandy to cure him so that he wouldn't need glasses?"

As I said this, down came the cloth from the boy's eyes. He was interested and returned my smile.

"Just you leave him to me and I will help him," I said to his mother. "And never mind leaving your work for him again. He can come here by himself."

"Sure ma'am, is it dreamin' ye are, or is it a bit o' blarney yer givin' me?" she inquired.

"No," I said. "It isn't dreaming or blarney. Be a good mother and watch your boy and see what happens."

I tested the boy's sight with the Snellen test card and found that his vision was 15/40 with each eye. Then I gave him a stool and showed him how to palm. Some minutes afterwards I told him to remove his hands from his eyes and look at the card. He stared at it as if some wild animal were after him. I discovered that his mother was threatening him, talking to him in a low tone. Evidently she thought she would please me by forcing him to do what I wished. By this time I knew that the boy was afraid of his mother, and I quietly invited her to take a comfortable seat outside the room. The boy informed me that his name was Joe, and as I smoothed his hair and gave him a few pats, the most affectionate look came into his eyes. Then we got down to business again. I told him to palm and reminded him of a baseball.

"Imagine you are throwing the ball," I said. "Blink your eyes to stop the staring and imagine that you are catching it. Now look at the card."

He smiled when he saw the letters come out blacker and more distinct than before. The redness of his face, which at first I had thought was from fever, left him, and his eyes of Irish blue were clear and wide open. I had to keep reminding him to blink his eyes all the time, He read the thirty line at fifteen feet and part of the twenty line, which I thought was doing well for the first visit. It occurred to me to see what would happen if he concentrated or stared. I told him to look at the first letter on the forty

line, Z, and keep his mind fixed on it, no matter what happened. As he did this he began to frown, his forehead became wrinkled, and his face reddened again.

"I don't like to do that, nurse," he said. "All the other letters disappear and my head hurts."

I told him to palm and remember the letter Z, thinking first of the top, then of the bottom. When he looked at the card, he saw the letters clearly once more, and read all of the twenty line at fifteen feet. When he arrived at the ten line, however, the first letter bothered him. He twisted his head in all directions. He stared at the letter and finally decided to palm again. After a few moments I asked him to open his eyes, and told him that there were three of the same letters on the card, but that they were scattered here and there on the different lines. Again he started to read the card, and as he saw the first letter on the one hundred line, which was a D, he said: "Now I know that the first letter on the ten line is a D."

Shifting his eyes from the one hundred line to the ten line letter had helped him to see it.

His last visit was a very interesting one. At the beginning of the treatment I explained to him how important it was to practice palming at least six times a day. He did not feel that he could spare the time, because he earned a little money running errands for the neighbors. At a later visit I had a talk with him about this and said: "If your eyes are cured you can earn more money during vacation time, but you cannot if they trouble you."

He agreed to practice at home many times a day. My rose garden in the country was in full bloom, and I promised to bring him a bouquet the next clinic day. Not having enough flowers for each patient, I wrapped Joe's bouquet in paper and asked Dr. Bates to carry it. Joe spied me first as we passed the long line of benches which were filled with poor people, all of them with eye trouble. His hair was combed, which was unusual, and he was spruced up generally. He was smiling, too, and his eyes were shining with great expectations. But when he saw that my hands were empty, the smile vanished, and a look of disappointment came into his eyes. I know what it means to be disappointed, so I whispered to him at once that Dr. Bates was bringing the bouquet for him, and the sun shone for him once more. I was well repaid for those flowers, for that day Joe made wonderful progress.

He had to wait some time before I could treat him and he never took his eyes off me. I could feel his gratitude, and my impulse was to gather him in my arms and hug him tight; but I refrained, thinking he might resent the familiarity. He read the ten line at fifteen feet, in less than a minute, and he told me that he did not suffer any more pain in his head. He also said that his studies seemed easier to him when he remembered not to stare or think too hard of one thing.

## **MENTAL PICTURES**

So many patients tell me, when they first start treatment, that they have no mental pictures. They cannot seem to remember or visualize anything while palming. If the mind is under a strain, no amount of palming will improve the vision either temporarily or permanently.

A little girl, not quite three years old, had convergent squint of her left eye as a result of an attack of measles. In testing her vision I held the card up close and she was able to tell me which way all the E's of the E card were pointing. The squint was not so pronounced. But when I held the card five feet away from her eyes, the left eye turned in almost completely, that is to say, one could hardly see the iris.

I placed her little hands over her closed eyes and told her to think of her best dollie and tell me how it was dressed. I didn't expect her to tell me much because of her age, but the little tot surprised me. She lisped in her baby talk that her best doll had a pretty pink dress, and that her shoes were black and had straps on just like her own shoes. Her mother held her as she stood on top of a table, and when she looked at the test card five feet away, her left eye remained straight temporarily, while she read 5/30 without a mistake. Her mental picture of the doll was perfect. Describing the shoes and dress helped.

At one time I had four boys under treatment. They were between the ages of nine and twelve, and all were near-sighted. They stood in a row and while they palmed I talked about baseball. I described the ball, and they explained to me just how the ball field was arranged. After I had tested each one in turn and improved their vision, they were encouraged to palm more. Their mental pictures were of first and second base, a home run, seventh inning, and similar baseball features. The four boys obtained normal sight in less than two hours that day. Two of them had 10/50 before treatment and improved to 10/10. The other two had 10/40 and 10/30 before treatment and improved to 15/10.

A young mother was being treated for headaches. Ever since she could remember she had suffered

severe pain in the back of her head and eyes. Glasses were put on her when she was a small child, but they did not relieve her pain. One of her neighbors told her how Dr. Bates had cured her of eyestrain, so she came feeling that she, too, could be benefited.

Palming did not give her any relief at first. She had attacks of hysteria, but I was always able to quiet her when I asked her about her children,—two girls and a baby boy. While we were talking she was palming. I noticed that the corners of her mouth drooped, and as she talked she had no control of her tears. I had a strong desire to place my arms about her. When I discovered that her baby boy was much loved in the family, I questioned her about him.

I said: "Tell me the color of baby's eyes. I love little boys. Describe him to me."

A smile was noticeable as she answered: "His eyes are brown and his hair is blonde; and you ought to see the two dimples he has when he smiles. I must not forget to tell you that he has two teeth, and when he smiles you just have to smile with him."

I watched her as she talked. The drooping corners of her mouth had been supplanted by a smile. Before I had time to tell her to remove her hands from her eyes, she did so herself. With a sigh of relief she looked at me and said: "I have no pain now, I feel so good I want to laugh and sing." A mental picture of her baby boy, remembering and explaining all about him was a relaxation, a benefit to her. She attended the clinic six months before she obtained normal vision permanently. She had a high degree of myopia when she first came, and her vision was 10/200 with both eyes.

During the first few weeks her pain would return, but each time it was less severe. When she became able by herself to form mental pictures, her pain would disappear and her vision improve. At times, when her mental pictures were imperfect, her vision was lowered, and this always caused an attack of hysteria. Later her vision steadily improved, her pain disappeared, and toward the end of six months she obtained normal sight, 10/10.

During the six months of her treatment she had to be encouraged frequently by her husband or sister to palm every day. The swing of her body from side to side, while blinking and remembering something pleasant, always helped her pain. To take care of her children and do her household duties was quite enough for any woman, but she made time to practice and was well repaid.

After the World War we treated many of the boys on their return from France. One of them had been gassed. His mind was very clear and he related some interesting things that happened over there. I noticed, however, that when he described something unpleasant or horrifying, he stared and the sclera or white parts of both his eyes became bloodshot. His vision was normal both for the distance and the near point when he did not stare or become excited. He said the only thing that kept him from going insane while he was at the front, was the knowledge that his little son, who was born after he arrived in France, was waiting for his return. He saw his pal shot to pieces almost by his side. His mental pictures were not pleasant ones, but when a photograph of his wife and baby arrived, he carried that picture with him all the time.

I showed him how to palm and told him how necessary it was to think only of pleasant things while palming. He told me many things about his little boy, and how proud he was of him. I kept him busy talking while he palmed for a half hour, and then I asked him to remove his hands from his eyes. His eyes were no longer bloodshot. The sclera was as white and clear as that of my own eyes. I told him to return for more treatment, deciding to use the sun-glass if necessary. He said that if his mental pictures did not help in his home treatment, he would surely return. I never saw him again.

### **IMAGINATION RELIEVES PAIN**

Eyestrain is a discomfort not only to the sufferer but also to his family and friends. A girl, aged twelve, had intense pain in her eyes and head. Her tired-looking mother told me that the child kept her awake at night with her moaning. She had taken her to another doctor in the hospital, and he, failing to relieve the pain, had sent her to Dr. Bates, thinking that her eyes might need attention. Dr. Bates examined the child, and without telling me what the trouble was, told; "Here is a good case for you; cure her quickly."

The poor child could scarcely open her eyes, and her forehead was decidedly wrinkled, I tested her sight, and at twelve feet she read the fifty line on the test card, which had figures on it instead of letters. While reading the card she said that her pain was not so bad. I told her to close her eyes and asked her to imagine that she saw the blackboard at school, and that she was writing the figure 7 upon it with white chalk. She could do this, she said, and then I asked her to open her eyes and look at the

black 7 of the thirty line. She saw it very distinctly, and I noticed that her eyes had opened wide and that the wrinkles in her forehead had disappeared. The mother noticed this too, and exclaimed: "See how wide open her eyes are!"

Evidently the pain had gone, for after a moment, the little girl cried out in great excitement: "Oh, that pain is coming back!"

I told her to close her eyes at once and remember the figure 7, Noticing how much she had been helped by her imagination, I told her to imagine the black figure blacker than she had seen it with her eyes open. She did this, and when she opened her eyes in a few minutes the pain had again disappeared and her vision had improved to 12/20.

After telling her mother that the cause of all the child's trouble had been eyestrain, and that if she would palm and use her imagination she would be well in a few weeks, I sent her home. Imagine my surprise when two days later she came to the clinic, with her eyes wide open, grinning from ear to ear, and having a gay old time with a school friend whom she had brought with her. She told me that only once, during the first evening after she came to the clinic, had she suffered any return of the pain. Then she had closed her eyes and covered them with the palms of her hands, because she remembered seeing other patients in the room doing so on her first visit. First she imagined that she saw a figure 7, black on a white background. Then she imagined white roses and daisies with yellow centers, and green fields. She went to sleep soon after and did not wake up till morning. She had had no pain at all since that night, and when I tested her sight I found it normal, 10/10, with both eyes together and each eye separately. I was happy to have accomplished in two days what I expected would require two weeks. The patient was instructed to keep on practicing and to report at least once a week at the clinic, but she did not come again.

A boy named Harry, aged eleven years, also came to us with pain in both eyes. He had been sent to us from the public school for glasses. Reading made him nervous, he said, and he did not wish to read anything on the test card but the large letters. I had him stand fifteen feet from the card, and asked him to read the letters slowly and to see only one at a time. Noticing that he was extremely nervous, I lowered my voice and talked to him as I would to a child much younger. This seemed to have a soothing effect, for immediately he seemed less nervous and shy, and he was able to read the forty line with his left eye, and the fifty line with his right eye at fifteen feet. I showed him how to palm. This seemed to afford him much amusement, but he did it faithfully because he wanted to please me, not because he thought it would help his sight.' When he opened his eyes he read the twenty line with the left eye, but the vision of the right had not improved, and he complained that the pain was still as bad as ever.

I told him to palm again, and while his eyes were covered I asked him if he ever saw a large ship getting ready to sail. He said, yes, he had seen some of our warships on the Hudson River. I asked him what he could imagine he saw on one of these vessels. He became intensely interested, and was no longer inclined to be restless.

"Why," he said, "I can imagine a rope ladder on the side of the ship and sailors walking on the deck, and I can imagine black smoke coming out of the smokestack." Before I told him, he uncovered his right eye and read all of the letters on the forty line and some of the thirty line. He said that the pain had gone, and that the letters looked blacker to him and the card whiter than before. He attended the clinic regularly, and became able to read 15/10—better than normal—with both eyes. He still complained about a little pain in the right eye, but when he palmed and imagined that he was playing baseball, or doing other pleasant things, his pain stopped and he always left the clinic smiling. For about six months or so after Harry was cured, he continued to visit me and became a very good assistant. He deserves a great deal of credit for the good work he did in relieving eyestrain among school children after he was cured.

## PAIN

An Austrian woman, aged thirty-seven years, complained of pain in her eyes and head. At the age of two years she had become totally blind after a fever, and had remained so for a year and a half, during which time she suffered continual eye pain. When her sight returned, strong glasses were prescribed but they did not relieve her pain. Neither did the glasses given to her later by various physicians. Finally an optician, finding that glasses did not help her, suggested that she try Dr. Bates and our clinic.

At her first visit her pain was relieved by palming, and her vision improved from 10/70 to 10/40. She was so pleased that she smiled and kissed my hands. At times the pain had made her sick at her

stomach, she said, and she was unable to retain her food.

She was instructed to continue the palming at home, and to keep it up for an hour at a time whenever possible. For a while she got on very well. Her vision improved to 10/20 and whenever she felt the pain coming on she palmed, invariably obtaining relief.

Then came a day when I found her with tears in her eyes. She had had a sleepless night and had suffered so intensely that her family was frightened. Her eyes felt as though sand were pouring out of them onto the pillow. I asked her if her eyes were still paining her, and she answered tearfully, "Yes."

I felt that if I could relieve the tension and get her mind relaxed she would feel better. I placed her comfortably on a stool, and while her eyes were covered I began to talk to her about her children. She soon forgot her pain in telling me what beautiful eyes her baby had, and how thrilled the family had been when the first tooth appeared. I encouraged her to keep on talking, and told her to imagine that she saw her baby smile, while her eyes were covered. When she uncovered her eyes, the most remarkable change had come over her face. All traces of pain had disappeared, and she smiled. She agreed with me that when she did not worry and thought only of pleasant things, her mind was at rest and she suffered no pain.

One day after she had been coming to the clinic for a year or more she was arranging to send some money to Austria and trying to fill out the necessary papers. As she was about to write her mother's name, everything before her became a blank and she experienced an intense pain accompanied by a burning sensation in her eyes. She was so frightened that she wanted to cry, but suddenly she thought about the clinic and how her pain had been relieved by the palming. She covered her eyes with the palms of her hands for a little while, and then the pain became less and the questions on the paper began to clear up. When she tried to write, however, everything became a blank once more. Again she palmed, and this time her sister, who was with her, reminded her that she must palm for a longer time if she wanted to get results. She tried it again while her sister encouraged her to remember something perfectly with her eyes closed. When she removed her hands from her eyes the print before her appeared perfectly distinct, she wrote the necessary answers without any difficulty, and had no more trouble with her eyes that day. To think that she had been able to improve her sight and relieve her pain without our assistance delighted her.

### **PAIN RELIEVED BY SUN TREATMENT**

Among others waiting for treatment was a young colored girl, aged seventeen, who tried in vain to keep her eyes open. She made all sorts of grimaces and her mouth was distorted as she kept trying to see things about her. One of our private patients who came to visit the clinic was standing beside me and as she observed this colored girl, remarked: "Isn't she disagreeable-looking?"

My visitor was surprised when I answered: "She is in pain and cannot possibly look natural."

I was eager to treat this girl because I felt that it was possible to relieve her suffering. She did not return my smile but I forgave her. I could not induce her to even glance at the test card because she said the light caused so much pain in her head and eyes. I told her to close her eyes. Then I took her hands and placed one over each eye to shut out all the light. She was reluctant to keep her eyes covered, but when I explained that this was palming and that it would help her to be cured, she behaved very well and sat quite still for fifteen minutes. I did not use the test card again for her that day, but the palming helped her so that she could open her eyes in a natural way with less pain. She was instructed to rest her eyes by palming frequently.

Two days later she appeared again and said that palming did not always help her. I decided to try the sun treatment and see if that would help. I placed her on a stool at a window where the sun shone in, and told her to look down as far as possible, to be sure that she would not glance up at the sun during the treatment. I raised her upper lid, and with a sun-glass flashed the strong rays of the sun on the white part of the eye. This required only a fraction of a minute and the effect was instantaneous. The first thing she did was to look up at the sun and then at me. What a change came over her face! For the first time she smiled and showed her pearly white teeth. All she said was: "Pain is all gone, ma'am."

She returned again every sunshiny day for more sun treatment, but she no longer complained of pain. The sun treatment had cured her. When I tested her eyes later with the test card, she read 10/10 with each eye separately.



## QUICK CURES

Patients who are cured quickly of imperfect sight are those who become able to improve their memory and their imagination quickly and without effort. A little girl named Madeline, aged ten years, came with her mother, who was very anxious to have her child cured without glasses. The mother had been notified by Madeline's school teacher that her daughter could not read correctly what was written on the blackboard from her seat, which was about ten feet away. She was one of the daintiest little girls I have ever seen. I can imagine her as one of the white fairies written about in our little magazine, which I believe a great many children enjoy. I feel sure that there are many mothers among our subscribers, and that they realize the relaxation and rest which is given to the child-mind, as the mother reads about the good fairies just before the sandman comes.

This is how Madeline was cured in one visit. She stood ten feet from the test card, and read all the letters correctly down to the twenty line, 10/20, but the letters were not clear and black to her. She was told to palm for ten minutes or so. Then she read the card again, and this time the letters appeared clear and black.

The mother was told to notice how she stared when trying to see one of the smaller letters of the fifteen line. I told Madeline that she must blink all the time to prevent staring, which always lowered the vision. As she glanced at the letters each time she moved to the left, and then to the right, not forgetting to blink, her vision improved to 10/10. She was placed in another room, fifteen feet from another card, which she had not seen, and without a stop she read all the letters of the card. Desiring to find out if I could improve her vision further with the aid of her memory, I told her to close her eyes and palm, and to remember something she had seen without effort or strain. She answered: "I cannot think of anything just now, and the more I try the less am I able to do as you wish." I asked her then to tell me what lesson she liked best at school. "Oh! I just love arithmetic," she said.

While she palmed, I gave her some figures to add. I started with easy ones at first, like nine, three and eight. She added as quickly as I announced them. Then I made the lesson more difficult, but she did not once make a mistake. All this time she was smiling and enjoying the whole thing. We kept this up for fifteen minutes, and then while her eyes were still closed, I moved the test card as far away as I could place it, which was eighteen feet. Madeline was told to remove her hands from her eyes and stand and swing as she did before. She read every letter on the card correctly. Her vision had improved to 18/10 by the aid of her memory for figures.

Madeline was cured quickly because she was able to remember figures perfectly. Her mental pictures of them were perfect. Her mind was relaxed, and by the aid of the swing and remembering to blink often, as the normal eye does, she had no more eyestrain.

Not long ago a little boy, aged seven years, was brought to me. His nurse, who was extremely fond of him, did not want glasses put on the little fellow, He told me emphatically that he would not wear them,—no one would dare put them on him, he said.

His little forehead was wrinkled as he tried to read even the largest letters of the test card at ten feet. I asked the nurse to sit where she could watch him at the start, and then see the change that I was sure would come to his face after he was taught to read without effort or strain. With each eye separately he read 10/50. As he tried to read further he wriggled and twisted his little body around in the big arm-chair where I had placed him.

"Now," I said, "little man, just close your eyes and place your hands over them and shut out all the light. Sit still, if you like."

"Oh," said he, "I like sitting still if I keep my eyes covered, but I don't like doing it too long."

I said: "All right, keep them covered for a little while and I will read you a fairy story that tells something about the elephant, too."

That was all that was necessary. My patient sat perfectly still as I read the whole fairy tale. The nurse remarked that for a long while he had not been able to sit still for more than five minutes at a time.

After the fairy story was finished, I told the little chap to stand, feet apart, with eyes still closed, and I guided him in moving his body from right to left until he became able to do so gently by himself. Then he was told to open his eyes and keep moving or swinging his body to the right and then to the left. He was directed to blink his eyes while doing this.

He exclaimed with great surprise: "My! the card and letters seem to be moving opposite."

I said: "That's right, my boy; now follow my finger as I point to the letters." He did, and to our surprise he read the whole card without a mistake, 10/10. The wrinkles in his forehead were gone. I told the nurse to help him many times every day with the test card just as I had. She promised also to

bring him back to me if he had any relapse. So far I have not heard from her. I do believe that my little boy was cured in one visit.

### **CRIMINALS**

Some years ago I was asked to go to Sing Sing prison at Ossining, N. Y., to assist in examining the eyes of some of the prisoners. I firmly believe that if some of the prisoners had had no eyestrain, their minds would not have turned to crime.

A foreigner who was imprisoned for arson, told me in a few words how sorry he was that he set a building on fire for the sum of five dollars. He could not get work, he said, because he had bad sight. As a new baby was coming into his home where there were already three, he was desperate and, not realizing how wrong it was, he did as he was bidden. Here was a foreigner who could hardly speak English, who was willing to do most anything for a wonderful five-dollar bill, in order to help his wife.

Four years had already been spent in prison. Through the kindness of Warden Osborne, who was at that time doing such wonderful work inside the prison, he was allowed to live in a cell where there was a little bit of sunshine now and then. From being in a dark cell for a whole year, before Mr. Osborne came, the sight of his right eye was practically destroyed.

There were so many patients in the room, sent there to be examined by Dr. Bates, that we had very little time to devote to each one individually. I arranged a test card on a desk and placed this man about five feet away. In just a few moments the sight of his good eye improved from 5/200 to 5/50.

He was so overjoyed that he fell on his knees before me and held my two wrists very tightly. He pleaded with me to help him out of prison if that were possible. He was eager to go to the new baby who had arrived after his sentence. Some people might say: "Oh, yes, he told you a hard luck story." Nevertheless I can understand enough to convince me that, if conditions had been better for him when he came to this country, he might never have committed this crime.

Sometimes as I go along the streets or ride in a car early in the morning to my work, I watch a policeman as he walks his beat looking in at each store window. He is told to do so to protect the storekeepers. I wish there were policemen who understood the fitting of glasses, to invade the stores of those opticians who fit people with wrong glasses. They should be brought to justice.

I have found that many patients who come to us at the clinic are wearing the wrong glasses for their eyes. It is not always eyestrain which causes trouble, but the mistake of the optician who commits a terrible error.

I would like to tell about a recent case, a girl, eleven years of age, who had myopia with glasses on, and almost normal vision without them. As I do not test the strength of eye-glasses of the cases which come to me, I was not at all sure whether the child was wearing them for fun or not. The first question that came to my mind was, whether she was wearing someone else's glasses. I asked Dr. Bates to test them.

At 15 feet I asked her to read the test card, and with glasses on she read 15/100. I took off her glasses and she stared at the card, that was all. I told her to do the usual thing, just close her eyes to rest them for a moment or so. When she opened her eyes again and looked at the card, she read without a stop from the 200 line letter down to the last letter of the 20 line. She looked at me in great surprise and smiled. The discovery that she made seemed to give her a thrill.

I asked her who fitted her for glasses. She said that the school nurse had called to see her mother and complained that the child could not see the blackboard, nor read the test card when her eyes were examined in School. Her mother immediately took her to an optician to be fitted for glasses. She said that the optician had charged her mother \$4.50 for glasses and for the examination of her eyes. To my mind this was not only an error but a crime.

When I told her it was a great mistake for her to wear those glasses, she promptly put them away in the case and begged me to help her some more. She obtained normal sight that day, but did not return again for treatment. A schoolmate who was with her the day she came, told me that she did not wear glasses any more. She sat in the back seat of her class-room, showing off to her teacher for all she was worth, reading the blackboard better than she ever did in her life. She also told me that the patient informed the teacher about our clinic and taught her how to palm. She is surely spreading the work of Better Eyesight in the classroom, and can do more than I because she is right there.

**MENTAL STRAIN - Case No. 1**

There are many people generally considered insane, who are really under a severe mental strain, which can be relieved by relaxation. A young man, aged 27, had large staring eyes, which would make anyone uncomfortable to look at him. I asked what his trouble was. He smiled and said: "Now, that's just what I am trying to find out. Nobody seems to want me. Everybody thinks I am crazy."

I answered: "You are wrong; I don't think you are crazy." Just the same this poor fellow did make me sort of creepy. I was just a little afraid of him, but dared not show my fear.

He had much to say, but the main thing he wanted me to know was that he was not insane. When he calmed down a bit, I said: "Now let me say something. I know that you are staring so badly that if you don't stop it you can easily become insane or blind."

I wanted him to understand that I could not help him nor anyone else, if he continued staring his eyes out of his head. I asked Dr. Bates to examine his eyes and to tell me what treatment was best for him. The doctor reported that there was nothing organically wrong with his eyes, but that he was under a terrible mental strain. I understood very well what was before me when Dr. Bates said: "I think you had better knock on my door if the patient tries you too much."

After I had taken his name and address, I asked him where he was employed. His eyes protruded and he stared without blinking, as he answered: "Didn't I tell you that no one wants me? I cannot get any work. America is at war. Does Uncle Sam want me? No, I have been to all the recruiting stations here in New York, and all of them have refused me. I want to fight for my country, but they won't give me a chance."

He actually wept and I could not refrain from crying too. His mind was affected, yes, but when he was calm all he could think of was Uncle Sam and how he wanted to fight for him. I had not been acquainted with him half an hour when I understood easily enough why the United States could not use him. He demonstrated to Dr. Bates and to me very clearly that one cannot have normal vision with a mental strain. I placed him ten feet from the test card and told him I wanted to test his vision. He answered: "I hope you will be able to improve my sight, because I think my nervousness will also improve."

He read a few lines of the card, but when he reached the fifty line, he leaned forward in his chair, wrinkled his forehead, and his eyes began to bulge. At that moment a small mirror from my purse came in very handy. I held it before him and the expression of his face changed immediately from strain and tension to a look of amazement. He waited for me to speak, and what I said affected him deeply. He covered his face with his hands and wept. I kept quiet but touched his shoulder lightly to reassure him. When he raised his head a few moments later, he said: "Maybe that is why they refused me. I guess they saw what you saw. No wonder they thought I was crazy."

I feared more hysteria, so I said that if he would let me help him, no doubt the U. S. Army would be glad to admit him into the service. After his first visit, he left the office, feeling much encouraged. I could not improve his vision beyond the fifty line that day, and decided not to test each eye separately. All I could record was 10/50 with both eyes.

A week later he came again. Apparently he had forgotten to practice. His vision was still 10/50 with both eyes. I directed him to cover one eye and read the card with the other. His vision with each eye separately was the same, namely, 10/50. He told me that I had encouraged him so much that he tried again to enlist.

I said: "You cannot expect to win out unless you take time to practice. This you must do all day long. When you tire of palming, keep your eyes closed and imagine something perfectly."

While I was telling him all this, he had his eyes covered with his hands, and was moving his body from side to side, very slowly. What he did next certainly frightened me. Without removing his hands from his eyes he asked in a loud voice: "Do you mind if I sing 'America' while I am reading the card?"

I answered: "No, but perhaps the other patients might object. Just wait a moment and I will ask the doctor."

Dr. Bates said that if singing was his way of relaxing, by all means let him sing. That was all that was necessary. He sang every word without a mistake, and after each verse he would stop long enough to read the card. After the first verse he read two more lines, 10/30. When he finished the hymn, he also finished reading the whole card without a mistake. He blinked his eyes as he moved his body from side to side, and I noticed a great change in the expression of his face. I directed him to sing "America" when he practiced reading the test card at home, every day. He left us in a very happy mood and promised to practice as he was told.

We did not hear from him until a year later when we received a letter from him, written from Bellevue Hospital, but mailed by a friend outside. In his letter he stated that he was all right, although he was confined. He also explained why he was sent there. It seems that when he applied at a recruiting station for enlistment, they found his vision imperfect. When he insisted that if they would only let him sing "America" his vision would at once become normal, the officers of the recruiting station considered this statement so absurd that they believed he must be crazy. He was at once sent to the insane ward of Bellevue, where he was promptly admitted. While there, he wrote a play of three acts, all about the doctors, the nurses, and patients. It was well written, and after he had persuaded some of the doctors to read it, they recommended his discharge.

He called to see us and I found his vision normal, 10/10. His mental strain was relieved and did not return except temporarily, when he became excited and talked rapidly.

### **MENTAL STRAIN - Case No. 2**

Just before the war, a Jewish woman, sixty-three years of age, begged me to help her eyes.

"Please don't bother trying to cure me," she said, "that is too much to expect, and anyhow I am an old lady, so what does it matter?"

Her eyes were half shut, because the light troubled her, and she felt more comfortable with the lids lowered. She told me that she was suffering great pain in both her eyes and her head, and when I had her look at the test card at ten feet, it was all a blur to her. I showed her how to palm, but the position tired her, and she said she was not accustomed to praying so long—she was quite a sinner. As she weighed over two hundred pounds, and was sick in both mind and body, I asked her how much she ate every day.

"Oh, I don't eat much—nothing to speak of at all," she said. "In the morning I eat eggs, or something like that, rolls, butter, and coffee. Then about ten o'clock I have a few slices of bread with more butter and more coffee. At noon I have soup, bread, butter, and more coffee. For supper I have bread, butter, meat, vegetables, and more coffee. That's all."

She took more food in one day than I did in three, and when I told her she ate too much, it appeared to frighten her, for she stayed away for two weeks. Eating, no doubt, was one of the few pleasures she had in life, and she did not wish to be deprived of it.

When she returned, I persuaded her to palm, and this improved her sight to 10/50. It also relieved her pain markedly, and when I told her that she would obtain more help for her eyes and her body generally, if she would eat less, she agreed to do so.

In spite of her pain and misery, my patient had always been full of humor, and her witty remarks had been a source of much amusement to me; but one day, just after the declaration of war, I found her in a corner of our room, weeping. When I asked her to read the test card for me, she said with tears, "Please, Nurse, I can't see anything today. My two sons have enlisted, one as a marine and the other as an aviator, and they are never coming back, I am afraid. I cannot sleep. My heart is breaking."

From the beginning I felt that she was a devoted mother, and as I am always drawn to good mothers, I felt a great pity for her grief. In order to get her mind off her pain, I encouraged her to talk about her boys.

"How proud you must be to have two sons to fight for your country and for you," I said. "I wish I had ten sons, I would give them all for my country."

These remarks were not very consoling, I admit, in the presence of a sorrow like this, and the stricken mother refused to be comforted. But when I said, "You wouldn't be proud of them if they were cowards, and Uncle Sam wouldn't want them if they were criminals in jail," she straightened up and said:

"You are right, they are brave boys, and I am proud of them."

I tested her sight again with the card, and found it better than ever before.

"You have the true medicine," she said. "I am coming again. I do not know why I can see so well now, after being so blind a few minutes ago."

I squeezed her arm above the elbow, and asked: "Do you feel that?"

"Yes," she replied.

"Well, that is just what you are doing to the muscles of your eyes, and the strain blinded you. When you relaxed, the pressure was relieved, and the sight improved. It was the pressure that lowered the vision."

At a later visit, she brought a package to me, explaining that she had no money, but wanted to express her gratitude. I took the package home, and when I opened it, I found a loaf of delicious real bread—not Hoover bread. My neighbors were very envious of me, because the only bread they could obtain during the war had a flavor like that of sawdust. At the time, I appreciated that bread more than a five-dollar bill.

Every time the patient came to the clinic, we talked about her boys for a few minutes, and it certainly had a good effect upon her eyesight. When the war ended, and the boys came home, every one who would listen heard of the great things they had done "over there." One would have thought one was attending an annual convention of some sort instead of an eye clinic.

During the war and for some time after, the patient came more or less regularly to the clinic. Palming always helped her, but as she complained that it made her arms ache to hold her hands over her eyes, I simply had her close her eyes without palming. This also helped her. One day I placed her further from the card than usual, and asked her how much she could see. She replied:

"Now you know I am an old woman, and I guess my eyes are getting old too. I cannot see so far."

I told her to close her eyes and rest them; forget that she had eyes, and think of black velvet, or her black hat. A few minutes later she read 10/20 and her eyes had a natural appearance. She became very much excited and asked me what I did to her.

Dieting also helped her eyesight and nerves very much, but she could not always bring herself to forego the pleasure of eating what she wanted. She forgot most of the things I told her to do at home, but I don't think she ever forgot a meal, nor did she realize the quantity of food she consumed when she gave free rein to her appetite. If she had always done as she was told, I am sure she would have been completely cured. As it was, her improvement was remarkable. Not only did she become able to read 10/20, but at the time she stopped coming to the clinic, she said that the pain and discomfort in her eyes had entirely ceased. She was sleeping better, and her general physical condition was much improved.

Her case made me realize more clearly than ever the relation of mental strain to defective vision. I could not help her until I found out what was worrying her, and when, by means of a little sympathy, I was able to get her mind off her trouble, or make it seem less to her, her nerves always relaxed. It was very interesting, the way a pleasant conversation, without other treatment, improved her vision. The experience was afterward a great help to me in treating other patients. In the rush of work at the dispensary, it often seemed as if I could not take the time to talk to the patients, to get acquainted with them, to let them tell me about their troubles. I know now that this is not a waste of time, but a very necessary part of the treatment.

### **THE WOMAN WITH ASTHMA**

When eyestrain is relieved, all other strains may be relieved. Asthma belongs to a large class of diseases with symptoms which may result from nervous or mental disturbances instead of from organic disease. Asthma has been called "functional neurosis." It was not strange, therefore, that this patient should note an immediate improvement in her breathing after palming, and that this treatment, in combination with hygienic measures, should have permanently relieved the trouble. Many similar cases could be reported, and even when organic disease has been present, the subjective symptoms have been mitigated.

During one of the summer months a woman with asthma came for treatment. She was forty years of age, but looked older. It was evident from the wrinkles in her forehead and her half-shut eyes that her vision was imperfect. She told me that she had continual pain and I could see that she had great difficulty in breathing. Her spirit was unbroken but her nervousness was something of a problem to me. She talked to any one in the room who would listen to her, and in order to preserve peace in the clinic, I had to keep her as much as possible by herself. I was sorry to do this, because her good humor was contagious and made the patients forget their pain and other troubles. We could not have the work brought to a standstill, even for such a desirable end as this.

The state of her eyesight did not seem to trouble her. It was her asthma about which she was concerned. When I asked her to read the test card, she said: "Please, ma'am, help me to breathe first; I have asthma and want you to help me; never mind my eyes."

"You are in the wrong room for asthma treatment," I replied. "Let me do something for your eyes, and then I will send you to another room where a doctor will treat you for asthma."

She smiled, evidently pleased that I had not sent her away, and proceeded to read the card, as I had asked her to do. Her vision was 10/30 in each eye. I told her to palm and on no account to remove her hands from her eyes until I returned to her. It was fully a half hour before I was able to do this, and when I told her to uncover her eyes, she asked: "What makes me breathe so easily?"

"The palming has helped you," I replied.

Her vision improved to 10/15 with each eye and she reported that the pain in her chest and back had gone. I gave her some advice about her diet, told her to drink plenty of water, and asked her to come to the clinic three days a week.

On the next clinic day, to my disappointment, I did not see her. I concluded that she did not care to bother about her eyes, although she was temporarily cured. I also doubted her willingness to give up the foods and beverages I had told her not to take, including meats and pastries. I had advised her not to drink strong tea and other liquids much stronger than tea. New patients were continually coming, however, so the poor woman with asthma went completely out of my mind. Two months later she rushed into the clinic like a cyclone. Most of these poor people do not think about waiting for their turn, so I have to forgive them when they break the rules. This woman did not think it necessary to wait until I had finished with the patient I was treating. As soon as she saw me she yelled in a loud, excited voice: "Please, ma'am, I didn't forget you! I didn't forget myself, either! I felt so good after you treated me, I just palmed and palmed every day for hours and I began to breathe so much better. My health improved and I went out and got a job right away. During the day my madam allowed me to rest my eyes, and I ate very sparingly. Sure, ma'am, it was no joke either, for I just love to eat good and lots of it; but I remembered what you said, and so I behaved myself. I must have starved the asthma away."

"I am very glad to hear all this," I said. "Now let me see what the palming did for your eyes."

Her vision had improved to 10/10 in two months. She accomplished the result, not I. When I praised her, she replied: "God bless you! You don't know how happy I am. I am working and supporting myself now for the first time in four years. But what surprises me most is that I have not been drowned by this time with all the water I have been drinking."

## CHAPTER V

### PRESBYOPIA

#### PRESBYOPIA - Case No. 1

DURING the war a great many women received treatment for their eyes. Many of them were employed in factories where American flags were manufactured and some of them could not see to do their work properly. Some had trouble in threading their needles, others complained that they saw double. One woman told me that she sometimes stitched her fingers in the blue field of the flag along with the stars. All of them asked for glasses, of course, but with the exception of a few, they were glad to be cured without them.

Among the patients was a woman about fifty who was very anxious to be cured. She spoke with a pronounced Irish accent, which amused the patients. Her distant vision was quickly improved by palming and flashing the letters on the Snellen test card. Then I gave her a card with fine print, and told her to hold it six inches from her eyes. Even though she did not see the letters, it would help her to alternately rest her eyes by closing them for a few minutes. She obtained good results immediately, and was enthusiastic in her appreciation.

"Sure, ma'am, may the good angels bless you for that!" she exclaimed. "I think this very minute I would be threadin' a needle if I had one. Me old man and the young ones at home will think it foine to have meself threadin' a needle."

It seemed that members of her family had been called upon to do this for her, and had found the task somewhat irksome.

The next clinic day she came again, and, although it was afternoon, she greeted me boisterously with the Irish salutation:

"Top o' the mornin' to you!"

"Top o' the mornin' to yourself," said I.

The patients all smiled at her remark. It does me good to see these poor unfortunate people smile a little, and I think it must cheer them, too.

She soon became able to thread her needle without any trouble, and she wanted everyone in the room to know it. The last time I saw her she said:

"Sure, ma'am, me eyes are very sharp now, for the minute I set eyes on me man when he comes home at night, I can tell by the twinkle in his eye whither he has had anything stronger than water or tay."

### **PRESBYOPIA - Case No. 2**

A woman, forty-eight years of age, told me that the first time she came to the clinic she thought she had entered the wrong place. Half a dozen people had their eyes covered with the palms of their hands, and she thought it was a prayer meeting. It was she who sewed her fingers to the flag with the stars.

"What I need is glasses," she said, "and that's what I am here for." But I soon convinced her that the glasses were unnecessary.

By having her alternately close and open her eyes I improved her sight for the Snellen test card from 15/40 to 15/20. Then I gave her the fine print to read, which was at first only a blur. I told her to palm, and imagine that she was sewing stars to the flag. When she opened her eyes her sight was worse. The very thought of those stars increased her strain and made her vision worse. This convinced her that her trouble was due to, strain, and that what she needed was to get rid of the strain. I asked her then to imagine more agreeable objects at the near point, such as a flower or the face of a friend. She at once became able to read the fine print, and her sight for the distance also improved. After four visits to the clinic, her vision both for the distance and the near point had become normal. It was quite easy for her to thread a needle and to do her work without glasses.

### **PRESBYOPIA - Case No. 3**

A woman of seventy-four, who had been coming to us for some time, worked every day in a place where she mended the children's clothes and did other sewing. She complained that her glasses did not fit her, and she could no longer see to sew with them. I gave her the card with the fine print:

"Do you mean to tell me," she asked, "that I will ever read that?"

"It is possible," I said.

Her smiling face was good to see, as she tried to follow my instructions. The print was larger on one side of the card than on the other, and I asked her to read the name printed in the larger letters. She could not do so at first. I told her to close her eyes, count ten, then open them and look at the card while she counted two, then repeat. In a few minutes she saw the name on the card and also the telephone number. She did the same thing with the diamond type on the reverse side, and after a while she became able to see some of the letters. Later she obtained further improvement, and after some months had no further difficulty in sewing the buttons on the children's clothes without her glasses. Covering her eyes with the palms of her hands while remembering perfectly, flowers or other pleasant things, always improved her vision. Once during a treatment I asked her to remember a daisy in a green field when she was in the country.

"There weren't any daisies but me while I was there," she answered. "I was the only daisy."



### **PRESBYOPIA - Case No. 4**

Frequently we find that colored people have difficulty in remembering their ages, especially when they are middle-aged or older. The colored woman in the present instance did not know her birthplace. One of the nurses was making a record of her age, name, and address, and then she asked her where she was born.

"Ah dunno where ah was born. How should ah know? It am so long ago—anyway it was a very hot place, dat's what ah knows."

Dr. Bates guessed her age to be about sixty or sixty-five years. Her eyes did not trouble her for reading, as she did not know how to read. But she complained that her eyes burned like fire, and that she could not see at a distance, nor thread a needle. Palming helped her, and the sun treatment relieved the burning of her eyes instantly. She had given up sewing several years ago, because, as she

explained, "Ah just thought man eyes were givin' out."

After one month's treatment she could thread a needle easily, and her clothes were stitched instead of being held together with safety pins. Her vision improved so that she could read 10/10 on the pot hooks card, which has the letter E pointing in different directions. By that time she had been coming about eight weeks altogether.

### **PRESBYOPIA - Case No. 5**

A colored mammy had pain in the back of her eyes. She had visited a doctor before she heard of Dr. Bates, and was told that her eye trouble came from indigestion. After trying a diet for six months which was prescribed for her, with the result that the pain in her eyes still continued, she came to us with very little hope of being cured. When I had taken the record of her name and age, which she said was 52, I asked her if she had ever worn glasses.

"No, ma'am," said she. "And you never can make me wear them; I hate them, I do."

"You know, my mother had only one bad habit until she died, and thank the Lord it wasn't wearing glasses. She lived a good simple life, but my, how she did love her corn-cob pipe! But she never wore glasses."

With the test card I tested Mammy's sight which was 10/30 with each eye. I moved the card one foot further away and this caused such a strain that she could see only the 40 line. Then I told her to palm and asked her to describe one of the letters which she had seen on the card. As she did not answer me immediately I thought she had not heard, so I repeated my request. She answered, "Do you know, ma'am, for a minute I couldn't remember a single letter," I explained to her that such was often the case and not to worry about it.

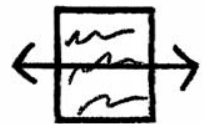
I pointed to the letter E and asked her to close her eyes and describe it. This she did by saying that it had a straight line at the top, also at the left and bottom, and that the right side was open. Before she opened her eyes I moved the card fifteen feet away.

Mammy had been palming about five minutes, still remembering the letter E of the forty line of letters. I stood beside the card with my finger pointing to the first letter next to the bottom line, called the fifteen line; then I said, "Before you open your eyes, please remember that you must not try too hard to see the letter at which I am pointing. If you do not see the letter immediately, do not worry about your failure to do so, but close your eyes again and remember the E for a few minutes." She opened her eyes and called correctly the letter R at which I was pointing. We were both very happy at the result, but I had her close her eyes again and remember the R better than she saw it. In less than five minutes she stopped palming and read all of the fifteen line correctly. I produced another card which she had not seen, and she was able to read the same line of letters as well. This proved that her vision had become normal.

Mammy thought she was cured, but I had my doubts as to her being able to read the fine print. When I held one of Doctor's fine print cards with diamond type six inches from her eyes, one would have thought that I had intended to strike her, for she drew back her head suddenly as the little card came in view. She shook her head sadly and said, "I shall never be able to read that fine print for you. That is too much to ask."

I answered, smiling at her: "No, you don't need to read it for me, read it for yourself."

She said she was willing if I would show her how. I told her to move the little card slowly from side to side, flashing the white spaces between the lines of letters without trying to read. She kept this up for ten minutes or longer and then she screamed as the letters began to clear up. Before Mammy left the clinic she read every word of the fine print card.



**Move the  
card slowly,  
side to side.**

### **MY YOUNG ASSISTANT**

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



When I told one of the patients to palm for ten minutes, Ethel placed her hands over her eyes also. She kept perfectly still for about two minutes, and then we heard a pitiful sigh. I watched, and presently two little fingers of her right hand began to separate, and she peeped. When she saw me smile, she quickly removed her hands from her eyes, and for a while she sat quietly. Presently she left the room to join other members of my family.

After the patients had departed, I discovered Ethel in a room, ordering my husband to palm. Her patient certainly needed to palm, and also to practice other things to improve his imperfect sight. Sometimes those whom we love are not easily persuaded to do the things that benefit them, but here was this little three-year-old very seriously giving him a treatment. She was pointing with her little finger to an imaginary test card on the screen door. She commanded; "Take down your hands and read the card. Do you see the R? Now close your eyes and 'member it," she ordered. Her patient responded in all sincerity. "Now open your eyes and read some more." He mentioned several letters and then she said: "Swing your body, side to side, and see letters swinging opposite."

He stood and swung as he was told, as her mother and I looked on in amazement, not daring to laugh, knowing that the little lady was very sensitive.

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

He read faithfully, following her little finger as she touched various parts of the screen door. All of a sudden she complained!

"You are staring. You shouldn't stare; that is bad."

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

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

She stood before him, blinking and swinging her body from side to side, looking as serious as a judge. At this moment, to my sorrow, we all laughed. I could not restrain myself a moment longer. That broke the spell, and my little three-year-old assistant began to cry. But since then her efforts have not been in vain, for I notice that her patient continues the treatment.

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

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

She knew Dr. Bates very well, and would talk to him about reading the test card to help children's eyes. She had perfect sight. Her eyes were never still, and she blinked unconsciously all day long. If only adults would follow her example there would be less eyestrain. I am very grateful to Baby Ethel for what she accomplished for my husband. Does not the Bible say: "And a little child shall lead them"?

## CHAPTER VI

### VARIOUS INTERESTING CASES

#### FOREIGN BODIES

A WOMAN who could not speak a word of English tried very hard to tell me of her suffering. Her son, aged fourteen, was with her and he repeated to me in English what she told him in Greek. Twice she had had the muscles of her left eye cut in order to relieve her pain. She was discouraged, the boy said, because two operations had done her no good.

Dr. Bates examined her left eye very carefully and when he turned the upper eyelid inside out, he discovered two small eyelashes growing in. This had caused all her suffering, because every time she closed her eye the end of these eyelashes rubbed the cornea of her eye. Under the supervision of Dr. Bates, I promptly removed the two lashes with a pair of tweezers and immediately her trouble was over. I cannot describe my happiness when patients show their gratitude after their sufferings are relieved.

Dr. Bates told me that day about a patient who came to him who had been treated medically by other doctors for syphilis. When he did not respond to the treatment the medicine was changed. Then they gave him treatment for rheumatism. The pain still continued, so he called on Dr. Bates. The doctor

examined his eyes and found a foreign body, a cinder, lodged in his cornea. This was removed and, for the first time in weeks, the poor man was relieved entirely of pain. My experience in clinic work makes me believe that in some places charity patients are not always thoroughly examined.

### OPERATIONS AT THE CLINIC

Many of our office patients have asked me if Dr. Bates approved of operations on the eye, or if he ever operates for cataract or other conditions. Others wish to know if there is a little Christian Science mixed with our method of treatment. I do not know anything about that, but I do know that Dr. Bates does operate on the eye when it is absolutely necessary.

I remember a dear old Italian woman, eighty-three years of age, whose daughter was just about to become a mother. The daughter had already made arrangements with the hospital upstairs and the newcomer was expected any day. The daughter was anxious that her mother should not suffer while she herself was away from home, so she appealed to Dr. Bates to operate on her mother. An operation was necessary, for the lower eyelid of her left eye was inflamed and swollen from an abscess of the left tear duct. For a long time the old lady had been coming faithfully to the clinic, but her condition gradually became worse, so that there was nothing else to do but to relieve her by an operation.

Of course such cases could have been sent to the hospital, but if it were at all possible to send the patient home after the operation, Dr. Bates would perform it himself, and so take away the fear and dread that some of these poor patients have of a strange doctor. This old Italian woman, who had the kindest and sweetest expression of any woman I have known, smiled as though we were arranging a party for her. She did not seem to mind it in the least as we placed her on the operating table. Most patients sigh and show traces of fear, which is natural, for I dread operations myself, and I understand their feelings, but she looked at me with kind eyes and smiled. I returned that smile in full measure. She in turn glanced at her daughter, who stood on the opposite side of her, and as she smiled at me again she said something in Italian. Her daughter promptly translated what her mother said, and as I remember, these were the words: "She say, you nisa da lady, you bigga da heart. She lovva you, she no afraid." I pressed the mother's hand gently.

She had the same smile and the same loving words for Dr. Bates when he began to operate. Not once did I hear her moan. When she wished to be reassured, all she did was to press my hand. Such courage is indeed admirable. The operation was accomplished without pain under cocaine anesthesia, and the patient was able to walk home an hour after the operation without assistance. Two days later she again came to the clinic with her grandchild, a girl about ten years of age. She stood among the patients waiting for attention and when I asked her how she felt, she told her grandchild to explain that she had slept peacefully the night after the operation, better than she had for a long time. She had no more pain and the eye was almost healed. The grandchild informed me that upstairs was a new baby brother and that mother was doing fine. Grandma wanted me to know that she had placed a candle in church, which was blessed for Dr. Bates and me in appreciation of what we had done for her. Grandma soon got well and that was the last we saw of her.

Another day a young woman who was troubled with chalazion tumors was also operated on. I cannot say that she behaved as well during the operation as did the old Italian lady, but we had a lively time while the operation was going on. The poor thing was extremely nervous, but she tried hard not to show it. She suffered no pain, but talked a blue streak. She informed us that her husband was employed on a ship making regular trips back and forth to Panama, and that we were going to receive the most wonderful fruits that we had ever tasted in our lives. I believe that if this woman had owned the whole of Panama we might have had it,—so many different things were never promised to us by one single patient. Doctor and I were working fast all the while, but just the same I wanted to giggle. Then she asked me if the doctor wore Panama hats during the summer, but Dr. Bates himself got ahead of me and promptly answered; "Indeed, never in my life could I afford a Panama hat."

"Well," said she, "kindly tell me your head size and I will see that you get one." Then she asked me if I would like to have one also.

"Of course," I replied.

We were finally told that within two weeks or so we would be presented with our Panama hats. This operation was in the summer of 1921, and we are still waiting for our Panama hats. But I really feel that the poor woman had the best of intentions, and I hope that her husband is still making his regular trips to Panama.

Later a young man entered the clinic with a small baby in his arms. Anxiety and worry showed in his face and he looked as if he had not slept for a week. As the baby was crying continuously, Dr. Bates immediately stopped work with other patients to attend to the little one. The young father, with tears in his eyes, told the doctor that for five days and nights the baby never stopped crying. Its mother had taken the child to another clinic, where the doctor told her that the child had a cold in his eye, and that drops applied in the eye would soon cure it. As Dr. Bates placed the child on his lap, the father asked: "Please, doctor, don't tell me that the baby has a terrible disease of his eye, and that he might lose it; please tell me that you can help him."

I held the baby's head in my hands, and as the doctor carefully examined the eye he found a foreign body, a piece of steel, firmly embedded in the cornea. In less than five minutes it was out, and the baby stopped crying. As the father passed out the door, he said: "Thank you, doctor, from the bottom of my heart."

Dr. Bates turned to me, saying: "Did you hear that? That 'thank you came from the man's heart, and it is worth a great deal to me because he meant it."

### **AN ACCIDENT**

A big Negro, six feet tall, came into our room very quietly, and sat in a corner with his head down. Evidently he was trying to hide the right side of his face. When I came close to him, I found that he had a very good reason for doing so,—there was a big cut over his right eyebrow which had been stitched up by one of the house surgeons the night before. We have to meet all kinds of people, and all kinds of cases, and we must not be afraid. Knowing that this huge bulk of dark humanity had been in a fight, I was very cautious as I approached him, but was relieved to note real kindness shining out of his good eye as he looked at me. I said:

"Poor fellow! How did this happen?"

In a kindly but very unsteady voice, he answered: "Well, ma'am, don't you feel sorry for me, ah was in a fight. You see ah had too much hootch."

It was not necessary for him to tell me he had been drinking,—I could smell it. So could everybody else in the room. Never would I have had the courage to approach him anywhere else but in the clinic, that is certain. He would have scared me to death if I had chanced to meet him in the street. Dr. Bates looked at his bad eye, or, I should say the place where the eye ought to be, and after the man had palmed for a little while, the eyelid opened. Dr. Bates prescribed eye-drops and salve. The patient was a happy individual when he learned that his sight was not destroyed, and that the eye would soon be well again. As the man left the room, I tried to say something encouraging to him, and his answer was this:

"Now, ma'am, don't you worry 'bout me; you oughter see de other fellow; he's in de hospital; yes, ma'am."

### **IRITIS - Case No. 1**

A young man complained of pain in his eyes and head, and sensitiveness to light. He told Dr. Bates that he had been to other clinics where they diagnosed his case as iritis. Getting no relief from eye drops which were prescribed, he came to us to see if we could help him.

Dr. Bates examined his eyes and agreed with the other doctors that the patient had iritis. Not knowing what the discussion was between this young man and Dr. Bates, I started to treat this case of iritis without realizing that the eye was diseased. I noticed, however, that the eyes were inflamed.

I placed the young man ten feet from the test card and asked him to read as much as he was able. He complained that the electric light near the test card caused a severe pain in his eyes. I placed him in the sun and used a sun glass. I flashed the strong rays on the white part of his eyes, after I had raised his upper eyelid and had him look down. Again I placed him ten feet from the test card, and this time he began to read the letters without complaining about the light. He finished reading the forty line, when he declared that the pain had returned.

I taught him how to palm and left him for half an hour. When I returned to him I was much surprised to find that the inflammation of his eyes had disappeared. His vision also improved to 10/10 with each eye separately. All this time Dr. Bates was busy with other patients and was paying no attention to the young man or me. I was very happy when the doctor told me what I had accomplished.

He said: "Did you know that this man had iritis?"

I replied, "No."

Then he proceeded to explain the customary experience with the treatment of iritis; namely, that these cases required usually three or more days before the pain in the eyes was relieved. In most cases it might require two weeks of treatment before the sight could become anything near normal. Always eye-drops were prescribed to be used frequently during the day, sometimes at night, in addition to general treatment which continued often for several years. To relieve a case of iritis in the short time of one hour was extraordinary—and this without local treatment or internal medicine.

"Never in my life," the doctor said, "have I seen such a bad case of iritis obtain perfect sight so quickly and acquire such relief in the condition of the eye."

### **IRITIS - Cases No. 2 and 3**

Iritis is usually very painful, and causes a patient to feel much depressed. A matron of a Working Girls' Home telephoned me to ask if it were possible to treat a young girl under her care. This girl was Florence, who was not the type generally found at the clinic, but as she was an orphan, we made an exception in her case and admitted her. Both her eyes were bloodshot, and she continually tried to shield them from the light. Even ordinary light was painful. The trouble began in her right eye, about a month before I saw her. Shortly afterwards, the left eye became inflamed. She was treated by a number of competent eye doctors, who said she had iritis. They gave her drops to put into her eyes, but the pain persisted. Later, one of these doctors advised her to have her teeth and tonsils examined, but instead of doing this, she came to me.

Dr. Bates examined her eyes with the ophthalmoscope. Then he asked me to examine them also, and tell him what I saw. When I looked into the pupil of the right eye, I could see the whole area covered with small black spots. It resembled the top of a pepper box. Her left eye was also affected, but not so much as the right.

Her pain was so intense that I did not test her vision with the test card immediately. She was told to palm and remember something pleasant. While palming, she described to me how her room was arranged. She remembered the figured draperies on her windows, which matched those on her chairs and bed. She removed her hands and opened her eyes before I told her, but the pain had disappeared, and she wanted me to know it.

I then placed her in the sun, being sure that her eyes were closed. The strong light of the sun was focused on her closed eyelids for a moment only. She drew away from the light quickly,—which is the usual thing for such patients to do. I encouraged her to let me try again. She closed her eyes and I led her into the sunlight once more. She liked the treatment.

Florence was advised to blink often, and to palm her eyes early every morning and during the day when possible. Six days later, I saw her again. The ophthalmoscope showed a decided improvement in the pupil of her right eye, there were only a few small spots in one side of it, and the left pupil was entirely clear. Florence stated that she had been working unusually hard, and also late at night. Therefore, she feared that the vision of her right eye would not be so good. She read 10/15 with the right eye on a strange card, but the letters were not clear. After she had rested her eyes by palming and practicing the sway, the letters cleared up, and she also read 10/10. Her left eye had normal vision. Then I gave her the sun treatment. The third time I saw her, which was also her last visit, both eyes had normal sight, and her pain had disappeared entirely.

Later we had another case of iritis, a woman much older than Florence. She was almost insane with pain in both her eyes. For an hour or more I could do nothing with her, because of her extreme nervousness. I placed the palm of my right hand over her closed eyes, as she leaned her head against me. Fortunately, she had her little girl, Betty, with her. While I palmed the poor mother's eyes, I held a conversation with Betty, solely for the benefit of her mother.

Mother love is one of the greatest things in the world. Betty was telling me how her mother had suffered all day long, and at night she had walked the floor because she could not sleep with the pain. As I held her close I could feel the mother relax. Then she began to talk about Betty's good qualities, and what a help she was. I placed the mother in the sun, still keeping the palm of my hand over her eyes. Then I held my sun-glass in a position so that the strong light of the sun would focus directly on her closed eyelids when I removed my hand. Knowing that the sunlight had been painful to her during her illness, I did not tell her what I was about to do. I planned to use the sun-glass very quickly, and not give her a chance to strain. I did this successfully, although I feared I would not, as some patients strain so in their agony of pain, that it is difficult to use the sun-glass for the first time. After the first

treatment this patient enjoyed it.

The vision in both eyes was 10/40, but none of the letters was clear. After the use of the sun-glass, I encouraged her to palm while Betty and I started another conversation. The subject was all about her baby brother. Betty would exaggerate once in a while about some of the things brother did, then her mother would correct her, and explain things differently. This was just what I wanted. Anything but the memory of her pain and discomfort would be a help. When she left the clinic she was temporarily relieved of pain.

Betty was invited to come with her mother at her next treatment. An eye specialist was visiting us, and after his examination with the ophthalmoscope, he pronounced it a bad case of iritis. He was quite positive that the patient could not be cured in less than six weeks. My patient came every day for one week, and at the end of the second week she was entirely well. During the time that her pain was being relieved, her vision also improved. The only methods I used were sun treatment, palming, and perfect memory.

I did not realize how great a help Betty was during her mother's treatment, until after her mother was cured. When patients suffer intense pain, I seem to feel it, and unconsciously I lower my voice, and speak as softly as I can. I believe that we all respond to kindness, which we need most of all when we are ill. Betty repeated to her mother at home a great deal of what she heard me say at the clinic. She tried to use the same tone of voice, and smoothed her mother's throbbing forehead, even during the long nights when sleep was an impossibility. Truly, Betty was my assistant in the cure of her mother's eyes.

### RETINITIS PIGMENTOSA - Case No. 1

When this case was brought to my attention, I knew very little about the disease of the eyes known as retinitis pigmentosa, except how to relieve it. I had been told that in this condition spots of black pigment are deposited in the retina, that parts of the retina are destroyed, and that the nerve of sight is diseased. Eye books which describe the disease say that it usually begins in childhood and progresses very slowly, until it ends in complete blindness. The field of vision is contracted, and, because they cannot see on either side of them, patients frequently stumble. In most cases the vision is worse at night than in the daytime. The books say further that no treatment is known which helps these cases. Nevertheless, Dr. Bates reported in the New York Medical Journal of February 3, 1917, a case of retinitis pigmentosa which had been materially benefited through treatment by relaxation. By the use of the same methods, I have been able to improve the sight in similar cases.

In October, 1917, Pauline, aged twelve, was under treatment for retinitis pigmentosa. At five feet from the card she could read only the seventy line, and her eyes vibrated continually from side to side, a condition known as nystagmus. She was very shy and extremely nervous, and appealed to me for glasses, so that she could see the blackboard. I have noticed that eye patients often suffer from extreme nervousness, but this poor child had the worst case of nerves I ever saw, and the slightest agitation affected her sight if, in asking her to read a line on the test card, I raised my voice and spoke rapidly, her face would flush, and she would say, "I cannot see anything now." But as soon as I lowered my voice and spoke gently her sight cleared up.

I told her to cover her eyes with the palms of her hands and remember the last letter she had seen on the card. This improved her sight so much that before she left the clinic that day she was able to see all of the fifty line at five feet. What thrilled me most of all was the fact that the dreadful movement of her eyes had stopped. Pauline came quite steadily to the clinic, and each time her vision improved. At last she was able to read the writing on the blackboard from her seat in the classroom.

Then I did not see her again for six months. When Pauline returned she told me that she had left school because she hated to study. She had also been ill during the summer. Her mother had taken her to a hospital for treatment. While there an eye specialist had looked at her eyes, and the inspection made her so nervous that they started to vibrate again from side to side. He said to her: "You ought to have your eyes treated; they are very bad."

"I am having them treated at the Harlem Hospital Clinic," she answered, "I know how to stop that vibration."

Then she palmed for a while and when she uncovered and opened her eyes, the doctor looked at them again.



Sun Treatment



Palming

Perfect Memory

"Why, they seem all right now," he said. "You had better go to that doctor until you are cured. He can do more for you than I can."

I was very much pleased to find that in spite of having stayed away so long Pauline had not forgotten what I had told her, and was able to stop her nystagmus. I tested her sight again and found that it was no worse than when I had last seen her. In fact, in some ways, it was better. She became a steady patient again and was anxious to have me help her more. I told her to palm as usual, and left her for a while. Later she read the thirty line at fifteen feet. When she looked first to the right of the card and then to the left, and noted that it appeared to move in a direction opposite to the movement of her eyes, she read two letters on the twenty line. At a later visit she read the whole of the twenty line at fifteen feet.



Look left and right of the card and see oppositional movement.

After a long absence Pauline again made her appearance, not for treatment, but to pay me a friendly visit.

Five years had passed since I first treated her, and it was a joy to learn that she had stayed cured. She waited until our patients had all gone and then she told me of her experiences. She is poor in mind as well as in purse and education, therefore we will excuse her for her diction:

"Gee, nurse," she said, "I'm awful glad to see you again. Gee, you don't look a day older. Don't yer ever get tired treatin' us poor people? I made a lot o' money this last year. Worked in a doll factory and made eighteen per with overtime. Yeah, I was engaged to be married, but I changed me mind and gave him back his ring. Oh, gee, you ought ter see the sparkler it was too! But I'm honest I am, so I didn't keep it. Ain't that the right thing to do?"

I said, "Surely."

"Me mother says if I ain't careful I'll be an old maid. My guy was a real estator too, he sells houses and lots. Well anyhow I lost him."

## RETINITIS PIGMENTOSA - Case No. 2

The next patient I treated for this dreadful disease was an old man of seventy. When I first saw him he was standing with many others, waiting patiently for Dr. Bates to speak to him. Because of his unusual appearance, I at once singled this dear old man out from the crowd. Most men of his age who come to our clinic are unkempt, dirty, and ragged—pitiably objects generally. But this man was well groomed, his clothes, though worn and old, were well brushed; his shoes were polished, his collar clean, his tie neatly adjusted. He had an abundance of snow-white hair, neatly parted and brushed, and his skin was like a baby's, pink and white.

I placed him five feet from the card, asking him to read what he could.

"I'm afraid I can't see so well, ma'am," he said; "My eyes bother me a good deal."

"I'll show you how to rest your eyes so that they won't bother you," I answered.

The best he could do at this distance was to read the fifty line. I told him to palm, and in a short time he saw a number of letters on the forty line. The next time he came I placed him ten feet from the card, and at this distance he read all the letters on the thirty line. He was so happy and excited over this that I too became excited. I forgot that I had other patients waiting for me and encouraged him to talk. I was glad afterward that I did so, for he had a wonderful story to tell.

"Do you know, ma'am," he said, "for two nights I palmed and rested my eyes for a long time before I went to bed,—and what do you think? I slept all the night through without waking up once. Now I think that's great, ma'am, because for years I have had insomnia. I would sleep only a little while; then I would get up and smoke my pipe to pass the time."

At a later visit I placed him twelve feet from the card and at this distance he was still able to read the thirty line. When he understood how easy it was to improve his vision by palming, he was pleased and excited.

"You know I'm so much better," he said, "that I didn't even notice that I was further away from the card than usual. Thank you, ma'am. God bless you, ma'am."

During the practice, when he failed to see a letter at which I was pointing, I said: "Close your eyes and tell me the color of your grandchild's eyes."

"Blue, ma'am," he replied.

"Keep your eyes covered, keep remembering the color of baby's eyes."

He did this, and after a few minutes his sight cleared up and he saw the letter. After we had finished

the practice I again encouraged him to talk, and he told me more about his insomnia.

"Do you know, ma'am," he said, "after I had had two nights' sleep without waking up, I didn't dare tell any of my family about it, for fear it wouldn't last and I would only disappoint them. So I waited. Now, do you know, ma'am, it is just two weeks that I have slept the night through without waking up once, and so I told my wife about it. She is so happy, ma'am, I just can't tell you, for it has been many years since I was able to get such rest."

I wish I could have had a picture of his face when he was telling me of the improvement in his eyesight and general health. It would have been a picture of gentleness, love, kindness and gratitude.

At another visit he looked up into my face and said: "I am seeing you better now, ma'am. You look younger." Dr. Bates heard this remark and laughed. In two months time this patient's vision improved from 10/200 to 12/30.

### **A CASE OF INTERSTITIAL KERATITIS**

A school nurse who was puzzled about the condition of a child's eyes, feared that the little one would be hopelessly blind within a very short time. She brought her to the clinic.

After Dr. Bates had examined her he said her trouble was interstitial keratitis, caused by syphilis. Such cases do not recover usually without local application of atropine and general treatment. But the child received no local or other treatment while she was under my care.

At first I could not do anything with her. She would not look at the test card when I asked her, neither would she look at me, but I was not annoyed at her because I knew that the poor child was suffering. Speaking softly and kindly to her worked like a charm.

When she finally looked at the card she could see only the large letter on the top at ten feet, or 10/200. When I told her to keep her eyes closed for a little while, she obeyed. Resting them in this way helped. They became clearer and she read 10/70 with both eyes.

I told her again to close her eyes to prevent staring, and to remember the last letter she had read on the card. The last letter of the seventy line on the clinic test card was an E, and when she tried to remember the whole of the letter, she said that her eyes began to pain her. I told her to remember only one part of the E at a time. This she liked to do because it was easier than to remember all of the letter at once. I stood close to the test card, pointing to the letter below the E, and when I told her to open her eyes again she saw the letter instantly. This was the fifty line.

I was sorry that I had to send her home at that moment. I wished to treat her for at least a half hour longer, but others were waiting. She was advised to practice palming and resting her eyes regularly six times a day, and to return in two days for further treatment. Her first visit began two weeks before Christmas. Each time she was treated I mentioned the possibility of a gift for her if she would do her best in practicing at home.

Much to the surprise of Dr. Bates, she made rapid progress. He informed me that her case was so bad that he did not expect much improvement for a month or more. After two weeks' treatment she read 15/30 and her eyes looked much clearer. I noticed, also, that she no longer held her head down. Neither did she complain that the strong light hurt her eyes, as it did before her treatments began. It was not at all easy to treat this poor little girl because she sulked, and I had to spend at least five minutes every visit to encourage her, and make her understand that working with her eyes, while it was hard for her, was surely worth the trouble.

A doctor, who was a stranger both to Dr. Bates and to me, was in our room at the time, and he watched us closely as we encouraged and benefited each case. The only remark he made to me was: "Why don't you fit them with glasses and be done with it? In that way you can get rid of these poor individuals much more quickly. They don't pay anything, so why waste your time?" I was so upset when he said this that I lost my temper, but Dr. Bates rescued the visiting doctor and kindly ushered him out of the room.

### **ALBERT**

Since we have had our private clinic, the charity patients come mostly from physicians. Others are sent by ministers of all denominations.

Albert, aged sixteen, was sent to us by a dentist's assistant who told me of his pitiable condition. His first visit was on December 6, 1924. Albert's sister, who is devoted to him, was present, being anxious to know if we could help him. When he appeared he was wearing a black patch over his left eye because

the light troubled him and he suffered intense pain. With the test card the vision of his right eye was normal, or 10/10, but the left eye had only light perception. This is a copy of his prescription for glasses, which he had worn for some time:

**R + 0.50 D. C. 90**  
**L + 2.00 D. C. 90**

Dr. Bates examined him with the ophthalmoscope and found keratitis, or inflammation of the front of the eyeball of the left eye. The right eye was normal. While the examination was in progress, Albert's sister was weeping, though she tried unsuccessfully to conceal her tears. They had been to other doctors and were told that Albert would always have to wear glasses to save the right eye; that nothing more could be done for the left eye. The last oculist whom they consulted said that the left eye had cataract, and as there was no sight, it was useless to operate. What a shock it was to his family!

I placed Albert in the sun with closed eyes, raised the upper lid, and with the sun-glass I quickly focused the strong light of the sun on the white part of the eye as he looked down. Immediately he called out to his sister: "I see the light. I can see a sort of web inside of my eye when the light is focused on it." This made me very happy indeed. I knew then that Albert could be benefited. His sister was overcome. While the tears flowed down her cheeks she said: "If you can only save that eye, there is nothing in the world I would not do for him. Mother and I will take care of him. He need never work again. I can earn enough money for both of us and he can spend all his time taking care of his eye. He must not go blind." The girl was hysterical, of course, but she meant every word she said; she loved her brother. At her age other girls are usually planning a future for themselves, but she was willing to sacrifice herself so that her brother would not go blind. That is love indeed.

When we started treatment, Albert became enthusiastic and palmed his eyes for more than a half-hour. He was told to think of pleasant things while palming. Being a perfectly normal boy, he could easily think of such sports as baseball and other outdoor games. He liked to think of the movies and imagine scenes from the picture called "The Covered Wagon."

One could hear a pin drop when Albert first looked at the test card with his left eye, still keeping the right one covered. The test card was placed ten feet from his eyes, and, while swinging his body from side to side, he flashed the large C on the top of the card. I was careful not to have him strain to see more, so he was told to sit comfortably and palm again.

He was with me over two hours that day and I improved his left eye to 10/100 by alternately palming, swinging, and blinking. When we first removed the black patch, the sclera or white part of his left eye was bloodshot. It looked very much as though blood was ready to pour from it at any moment. When it was first exposed to the light a considerable watering of the eye resulted, which was stopped instantly by the sun treatment.

Before Albert left us after his first visit, Dr. Bates asked me if I had time to treat him every day, saying that Albert's trouble was so serious that only by frequent treatment could he be cured. I was glad to give the time for which I have been well repaid. Our dear boy is almost cured. Every night I prayed earnestly for Albert and I know that without God's help I could not have accomplished what I did. Albert believes that, too.

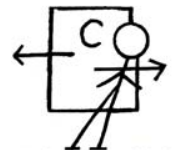
Every day of sunshine he improved a little with the test card. On January 17, 1925, all the redness of the sclera had entirely disappeared. Then his visits became less frequent. I told him to come once a week instead of daily. But Albert practiced at home every day for hours at a time. The condition of his eye improved steadily and by the end of February, 1925, the vision of the left eye was almost normal.

I am proud of Albert for another reason. He would not allow his sister to support him. He asked me if shoveling snow would make his eye worse again, I said no, as shoveling snow would be practicing the swing, and the exercise would be a benefit.

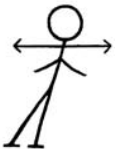
Then he said, "Please pray for snow. I want to work." Again our prayers were answered. That very night we had a big snow storm, and when Albert came the next day, he told me:

"I stood in line with my shovel and stretched myself as much as possible to look big. I got a job all right, and I will earn \$5.00 a day while the snow lasts." We had one snow storm after another and Albert had plenty of work to do.

Albert's case was most remarkable because he did not at any time suffer a relapse. I believe, also,



Swing (sway) left and right in front of the card. Flash the letter C. Notice the card moves in the opposite direction.





that the sun was the main factor in the relief of his trouble. I cannot understand why so many eye specialists shield the eyes of a patient from the sun. Bandaging them not only frightens the patient, but makes him very uncomfortable. It is true that some patients demur when they first learn that they are to be treated with a sun-glass, but as soon as the light is thrown on the closed eyelids, they relax and smile and ask for more. The sun is our greatest blessing.

### **ATROPHY OF THE OPTIC NERVE - Case No. 1**

In the year 1892 a patient came to the New York Eye Infirmary with well-marked atrophy of the optic nerve. According to all that we know of the laws of pathology, he should have been totally blind,—yet his vision was normal. The case was considered so remarkable that it was exhibited before a number of medical societies, but it was by no means an isolated one. On February 8, 1917, Dr. Bates published in the "New York Medical Journal," under the title, "Blindness Relieved by a New Method of Treatment," a report of a case in which the vision was improved from perception of light to normal. He has had quite a number of such cases.

In 1914 a colored woman was led into the clinic by a friend. She had heard of Dr. Bates, and had come to him in the hope that he might be able to restore her sight. The doctor examined her eyes, and found that she had atrophy of the optic nerve, complicated with other troubles. She could not count her fingers, nor had she any perception of light whatever. The doctor turned her over to me, saying:

"Help her, will you?"

She was the real "mammy" type of negress, very good-natured and motherly. She greeted me with a smile and said:

"May de good Lor' bless you, ma'am, ef you can gib me again de light ob day."

The words came from an humble heart, and her voice sounded hopeful. When I heard her speak I lost some of my courage. Perhaps I should not be able to do anything for her, and I dreaded to disappoint her. My work is not always easy; yet I like difficult cases to come my way, because when I can help them I feel that I have done something worth while.

"Won't you tell me how long you have been blind?" I asked.

"Yes, ma'am," she replied. "Ah hasn't seed nothin' for two years. Ah has been in de hospital all dat time an' de doctors say dat mebbe ah nebber sees again. Some friend ob mine says to me, 'You jes goes to de Harlem Hospital Clinic. Dere you find de doctor what makes you see.' So ah jes come; dat't all."

I told her to cover her eyes with the palms of her hands and asked if she could remember anything black. She replied:

"Yes, ma'am, Ah 'member stove polish black, all right."

"That's fine," I said. "Now keep remembering the black stove polish, and that will stop the strain in your eyes. When your eyes first began to trouble you, you strained to see, and every time you did that, your eyes became worse. Now let us see what will happen when you stop the strain."

I had stood her against the wall to make things easier for her, for we only had a few chairs at the clinic. I left her to treat other patients, telling her not to open her eyes, nor to remove her palms from them, not even for a moment. Presently I became aware of a strange sound, a sort of mumbling. I was greatly puzzled, but as I approached my blind patient, I discovered where the sound came from. She was saying in a low tone, "Black polish, black polish," just as fast as she could. I held a test card covered with E's of various sizes, turned in different directions, a foot away from her eyes, and told her to take her hands down and look at it. The doctor, the other patients, and myself were quite scared at the outburst that followed.

"Ma'am, dat's a E; dat's a sure-enough E. Ah is sure dat's a black E on some white paper."

This was a large letter on the first line, read by the normal eye at two hundred feet.

But the next moment it faded from her eyes. That was my fault. I was not quick enough. What I should have done was to have her close her eyes and palm again, the moment she saw the E. But I was greatly encouraged, not only because the patient had had a flash of vision, but because Dr. Bates had said he was sure I would help her to see again. I again told her to palm and remember black, and when, in a few moments, I asked her to take down her hands and look at the card she saw the E, blacker than the first time. I then told her to close her eyes for a minute and open them for just a second, alternately, while remembering the stove polish continuously. She did this for a while, and was able to see the E each time she opened her eyes.

"Now," I said, as I raised my hand and held it one foot from her eyes, "how many fingers can you see?"

"Three," she replied, which was correct.

I told her to rest her eyes by palming many times a day at home, and to come and see me three times a week. I also gave her some advice about her diet.

The next clinic day she saw the seventy line of letters at one foot, and they did not fade away as did the E the first time she saw it. I told her to palm again, and in a few minutes she counted my fingers correctly every time I asked her to, with only one exception.

"If dis here seein' keeps up, ma'am." she remarked, "Ah sure will be able to earn mah livin' again. De Lor' bless you, ma'am."

She continued to come and made slow but sure progress. Then came a time when she stayed away for several months. As I was very anxious to cure her, I worried about her considerably. Then one day she turned up again, apparently very much frightened about something, though her eyes looked better. I was glad to see her. She was very much upset, so I refrained from scolding her, and in the course of time I learned the reason for her absence. She had been under treatment for some other troubles, and some doctor or nurse had scared her into discontinuing her visits to our clinic. She had, however, continued to palm several hours a day with most gratifying results.

"Do you know, ma'am," she said, "Ah can see ebery house number as Ah goes visitin', and Ah goes out to a day's work once in a while."

She came regularly and her improvement continued. Sometimes I would find that she did not see so well as at her previous visit, but immediate improvement always followed palming. Her gratitude was pathetic, and every little while she would bring a package saying:

"Dis here is fo' you, ma'am. You sabe me from blindness. Yes, you did; an' Ah is mighty grateful."

The packages contained gifts of various kinds—a cocoanut from the West Indies, grapefruit and cucumbers, a necklace made of tropical beans of various colors.

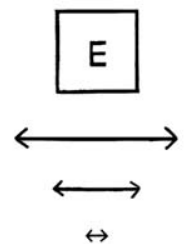
A short time later she washed a full set of Dresden china for her employer, without breaking a single piece, and earned four dollars and ten cents for her day's work.

Mammy had considerable trouble in keeping her eyes open while in the sun. With Dr. Bates' permission I gave her the sun treatment with the sun-glass, which always improved her vision, both near and distant. She began to see busses and automobiles a city block away, and then one day she told me the most marvelous thing that had ever happened to her.

"One day Ah was on de roof ob our house, an as Ah was bathin' mah eyes wid de warm sunlight wid mah eyes closed, Ah suddently opened mah eyes and dere, way up in de heabens, Ah sees a big white cloud, and de blue sky, and good Lor'! Ah calls mah frien' an shows it to her, an' she says Ah was correct sure nuf. Ah was thinking ob you ma'am, and de good Dr. Bates, an' Ah says, Lor' bless 'em."

The swing also helped in the improvement of her vision. She would stand twenty feet from the card and sway her body as far as possible alternately to the right and left. She could imagine objects in front of her moving from side to side, with great speed. Then she would shorten the swing until she imagined the card moving less than one inch from side to side. (A tiny, short swing, shift of the eyes from point to point) Her vision improved in flashes to 20/30 minus, and it is still improving. The long swing alternating with the palming is slowly but surely bringing about a cure. For the first time in many years, she is able to read, without glasses, the larger print of the newspaper.

Dr. Bates was very much interested in her improvement. He examined her optic nerves with the ophthalmoscope, and found that the circulation was returning, and that the optic nerves were becoming pink as they are in the normal eye.



## ATROPHY OF THE OPTIC NERVE - Case No. 2

While it is true that one sees at the hospital a great deal of suffering, sorrow, and poverty, it is a pleasure to be able to relieve some of the suffering. For instance, the case of a blind negro, which really ought to have been sad, turned out, instead, to be very amusing. In spite of his affliction, the patient seemed to be in a happy mood and well pleased with himself. He was neatly dressed and his shoes, though shabby, were carefully shined, and over them he wore spats. His cravat was a brilliant red and his hat a light shade of tan. A cane, which his blindness compelled him to carry, completed a costume

which I am sure he considered to be that of a "swell" gentleman. When I approached him, he said in a gracious manner: "Glad to see you, ma'am. Glad to see you."

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

At once I told him to palm again, and when he opened his eyes he saw the shadow of my fingers moving from side to side before his face. He did not laugh, but giggled, rather, just like a girl. In a few moments, however, the blindness returned. Again I told him to palm and while he was doing so I asked him if he could remember a black object, or something else that he had seen before he became blind, such as a beautiful sunset, or a white cloud in a blue sky. He thought a while, and then remembered that in the days when he had been a house painter he had used black paint. I told him to remember the black paint while he was palming, and then I left him to attend to other patients. When I came back to him, I held two of my fingers close to his face and asked if he could see them.

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

The man must have been popular with the ladies, for he then remarked that one of his "lady friends" would be pleased if he became able to see her. He attended quite regularly for a time, and I noticed an increasing improvement in his vision. Sometimes this was not very marked, and then I knew that he had not been palming or resting his eyes sufficiently at home. He was greatly helped by the focusing of the sun's rays upon the white of his eyes with a sun-glass, a treatment that had a soothing effect. Soon he was able to dispense with his guide, and, when leaving the clinic, used his cane to avoid collisions with benches, nurses and patients. One day as he was leaving the room, Dr. Bates called my attention to him, and I noted that instead of tapping with his cane upon the floor, he was carrying it on his arm. With head erect he walked down the long corridor, opened the door, and left the hospital, as easily as a person with perfect sight. A little later he came without the cane. On his last visit he read the fifty line at ten feet with each eye.

One day as Dr. Bates and I were walking toward the Harlem Hospital, we saw this colored dandy walking with his "lady friend" as though he owned the earth. He was all dressed up in a black and white checked suit, with a red necktie and spats, and a "sparkler" on his little finger. His eyes were fairly rolling in his head as he strutted along.

Dr. Bates looked on and in his quiet, humorous way said to me, "Such dignity I long to possess!"

### **ABSOLUTE GLAUCOMA**

In absolute glaucoma there is no perception of light, a condition considered to be incurable. It may or may not be accompanied by pain, and in the former case the only remedy previous to Dr. Bates' discovery, was enucleation, or removal of the eyeball. So far as Dr. Bates is aware, there is no case of absolute glaucoma on record in which any measure of sight has been restored by any method except the one described below.

The patient was a woman, aged seventy-nine. At first glance one could see that she was refined and of a gentle nature. I guessed that at one time she had been a woman of means. As she stood apart from the rest of the patients waiting to be attended, she took not the slightest notice of what was going on around her, and occasionally I heard her moan.

When Dr. Bates was able to examine her eyes, he found that she had glaucoma in both eyes, and that the right eye was blind, without even light perception. The vision of her left eye was 10/70. He asked me to do what I could to help her and stop her pain. Placing a stool before a table upon which she could rest her elbows, I showed her how to palm, which she did very readily. In just a few minutes the pain ceased and the eyeballs became soft. I told her to remove her hands from her eyes, but she still kept her eyes shut. I thought this was because I had not told her to open them, but when I said she might do so, she asked:

"Are you sure the pain will not come back if I open them? For many days and nights I suffered such constant pain that I could not sleep. Now I feel such a sense of 'relief that I would really like to keep my eyes closed."

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

I held a test card about two feet from her eyes, and told her to cover her left eye, and look at the

card with the right. That day, we had several visiting doctors whom Dr. Bates had told about this case of absolute glaucoma. These doctors also examined her eyes and said the diagnosis was surely correct. They were all standing by with Dr. Bates when I asked the patient to look at the card, and the excitement was intense when she stated that she saw the large letter at the top of the card.

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

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

It has long been the belief of eye doctors that glaucoma with blindness cannot be either improved or cured. It should be emphasized that this patient offered good evidence that glaucoma with blindness is not hopeless, and that it can be benefited or cured.

After a little more treatment I told her that she must keep her eyes shut as much as possible when she was at home, and to palm many times every day. I also told her never to look at any point or object more than a fraction of a second at a time and to keep constantly shifting. She went away pleased and grateful, for the pain had not returned.

The next time she came. Dr. Bates treated her and was able to improve the vision of the right eye to 10/200, while that of the left eye improved to 10/40. The third time she came she was treated by me. She was very happy and wanted to talk, which I encouraged her to do. She said she was living in a small furnished room and that I had no idea how worried she had been about going blind, because she had no one to look after her.

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

She came regularly for six months and her improved vision was most encouraging. We continually reminded her to use her imagination to improve her sight and relieve the pain. Most of the clinic patients become confused when I ask them to do this, but this dear old lady did not find it a bit difficult. I told her to palm, and then imagine a florist's window filled with flowers. Next I told her to imagine that she had entered the shop and was observing the flowers, and I called to her mind the red rose and the white rose, the carnation, the violet, and other blossoms. Then I asked her if she could imagine the green fields in the country where the daisies grow, and she said: "Yes, and I can imagine that I am picking the daisies too."

Then I told her to remove her hands from her eyes. I was overjoyed when she saw a T on the thirty line at ten feet. The patient herself laughed out loud and cried: "I cannot believe it."

#### Avoid Negative: People, Talk, Thoughts, Emotions

She was steadily improving, so I was not prepared to find her one day looking very much depressed. The trouble was that she had had a visitor who talked to her—or at her, I should say—for two long hours; this had upset her nerves so that the pain had returned, and her vision had been lowered. I pictured to myself what it must mean to listen to a steady stream of gossip for two hours, and my sight at once became imperfect. I told her what a dangerous thing it was for her to allow herself to be tortured in this way, and said that if her friends insisted upon talking to her for such a length of time, she must keep her eyes closed as much as possible. Otherwise the strain would cause her to go blind.

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

"Oh, nurse," she said, as soon as she saw me, "my right eye pains me so that I think of nothing but death."

Her thin face was lined with pain, and I could see that she was in agony. I began to talk to her about the days when she did not suffer and how she had stopped the pain by remembering the daisies. She began to palm without my telling her to, and became able to imagine a daisy waving in the breeze. I asked her to imagine that her body was swinging with the flower. She did this, and within a few minutes her pain left her and she smiled.

"Now, isn't it strange," she remarked, "but I forgot all about using my imagination."

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

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



"This is my daughter," she said of the woman, and I could see that she was very fond of her, but when she pointed to the man she said: "I cannot bear him. He makes me nervous and sick, because he is not a good man."

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

She became able to visit the clinic again, and her vision improved to 10/20 with the right eye and 10/10 with the left in five months' time. I never mentioned pain to her, and she never spoke of having any more pain. When her daughter called one day to say that her mother was leaving for the country, I felt that something worth while had been accomplished.

### **OPACITY OF THE CORNEA** **Eye, Cornea Injury, Scar Healed**

Myopic and far-sighted patients are numerous, and I always feel confident that in a short time I can improve their sight. I suffered a case of cold feet, however, when Dr. Bates placed in my care a young colored woman, aged twenty-seven. She had a scar on her right eye almost in the center of the sight. All the doctor said to me was, "Help this patient, please." It was my first experience with a case of this kind. I asked the girl how long the scar had been there and also what caused it. Being a Southern ducky, she spoke with an accent, and this is the way she answered me:

"When Ah was twelve years old, mah granmah was settin' bah de fireplace a-smokin' a pot pipe an', as Ah was removin' a boilin' kettle ob water, ole granny upsets de pipe ob hot ashes an done burned mah eye. Lordy, ma'am! Ah thought mah eye was burned from de socket. De doctors says Ah would neber see again out ob dat eye."

I tested her sight, and with her left eye she read 15/40, while with her right eye she could barely see my fingers one foot away. I had not the slightest idea that I could improve the right eye at all. However, I told her to stand in a comfortable position and palm for a least a half hour. Then she was told to keep her right eye covered and read the test card with her left eye. The left eye improved to 15/15. With her right eye she was able to distinguish the 200 line letter at the same distance. Dr. Bates was amazed. He said that, although he had seen opacities of the cornea resulting from constitutional disease clear up, he had never before, in his thirty-odd years of experience, seen any improvement in an opacity resulting from an injury, even after years of treatment. This encouraged me so much that I told the patient to palm again, and before she left the clinic that day her right eye had improved to 15/70. She became hysterical when she found that she could see objects again with her right eye. For a while she came quite regularly to the clinic, and at her last visit her right eye improved to 15/50, while with the left she became able to read 15/10. Dr. Bates declared it was a miracle.

### **HOW PATIENTS BENEFIT OTHERS**

Many reports have been received from those students of Dr. Bates who are conducting clinics. It is encouraging to know that this work is spreading rapidly. Clinics are being formed not only in America, but in Europe as well, and our representatives deserve the highest praise for their faithful work. A number of patients have taken a course from Dr. Bates, or myself, so they could teach others how to obtain normal vision. Mothers find it a great help to study the Bates Method. Some of them bring one of their children for treatment, and when they see the child obtain normal sight, they become eager to learn how to cure other members of their family. In this way the work has spread. If we could have a Bates Clinic in every town and city, people would be very much benefited.

There are many patients in the West, who are treating the poor without any compensation whatever. They may not have regular clinics, but it is clinic work just the same. We have over fifty patients in Cleveland, Ohio, and some of them are helping the poor there. A teacher in one of the public schools has cured many of her little charges who had defective sight. In her reports to Dr. Bates, she mentioned several cases of defective minds that she had benefited by palming, blinking and swinging. After a number of her pupils were relieved of mind strain, they were placed in regular classes.

This teacher had to be careful not to offend the authorities nor to mention that she was using any system or method. She had the pupils practice for a few minutes every day in her class-room. She could

appreciate eye education and common sense, because she was a cured patient.

A few grateful patients, well-known women of Cleveland, go about from place to place, helping unfortunate people who have imperfect sight. While I was visiting at the home of Mrs. H. D. Messick, I discovered that she was conducting regular clinic sessions in her home every week. Although she is a busy woman, she gives part of her time to treating patients who cannot come to Dr. Bates. She has done remarkably well with many difficult cases, some of which I would like to report:

A little girl, nine years old, had convergent squint of her left eye. Very little of the iris was visible when I first met her. I was surprised when I saw her again, about six months later. The left eye was almost as straight as the right, and with Mrs. Messick's help, her vision had improved to 10/10 at times.

A woman, with atrophy of the optic nerve of the right eye, and myopia in the left, was first examined by me in December, 1924. Her face was lined with pain, and she seemed to have no desire to smile. The right eye was nearly blind, and she could not see letters of the test card at any distance with that eye. Her vision was about 10/50 with the left eye.

She was directed to palm for about five minutes or longer, and then stand and swing her body from side to side, with a slow, easy sway. The vision of her left eye improved to 10/30, and she flashed the large C of the test card with her right eye. She was advised not to wear her glasses again, and to practice regularly every day. Mrs. Messick's efforts in helping this woman were certainly not in vain.

The last report I received was most encouraging, and ought to be so to any patient afflicted as this woman was. The vision of her right eye was 8/40, and the left eye was, I believe, normal at the time of her writing. However, she could read quite a little with comfort, and did not complain of pain any more. Her facial expression changed for the better, and she was very grateful for what had been accomplished.

Another case that I started about the same time, was that of a fifteen-year-old boy, who was wearing glasses for myopia. His left eye was almost blind, and the vision of the right was 10/30. I taught him to palm and swing, and in less than half an hour his vision in the right eye became normal, or 10/10. When he covered his right eye, the vision of his left began to improve for the large letters of the card, although they were not clear or distinct. I told him that if he wished to be cured, he would have to practice faithfully every day, as he was directed. He promised to do his part. I just gave him a start, but it was Mrs. Messick who cured him.

I visited him some months later, and found his vision normal when he read the test card with each eye separately. He saw as well with the left eye as he did with the right. He displayed some marvelous drawings of ships, which were done after he was cured.

The letter I afterwards received from him is printed below:

August 26, 1925.

My dear Mrs. Lierman:

I am so grateful to you and Mrs. Messick for having helped me to follow Dr. Bates' method, that I am writing to tell of my experience with my eyes.

About December, 1924, we were examined by the school doctor. He told me my left eye was nearly blind.

Mother immediately took me to a well-known oculist in Cleveland, and after several visits to his office, he prescribed glasses for me, to be worn always. A week had passed when I met you at Mrs. Messick's. You told me to discard my glasses and practice palming and swinging, which I gladly did.

Some of the teachers knowing I had worn glasses and seeing that I didn't after I had met you, tried to persuade me to wear them; but I wouldn't, when I noticed how my eyesight was improving.

After seeing Mrs. Messick once a week, and practicing regularly at home five minutes in the morning and five in the evening, my left eye gradually improved to normal.

With deep gratitude for being spared the great annoyance of wearing glasses, I am

Yours sincerely,  
Mac.

**CHAPTER VII**  
**PARALYSIS**  
**PARTIAL PARALYSIS OF THE THIRD NERVE**

GEORGE, aged five years, was sent to me by a physician, who diagnosed his case as paralysis of the third nerve of the right eye. A number of eye specialists said that he could not be cured. One gave him internal treatment for about six months and used electricity on the eye without much permanent benefit. When a nerve is paralyzed, its function is lost. In other words, the nerve is not able to bring about a contraction of the parts supplied by the nerve. To explain further, that branch of the third nerve distributed to the muscle which raises the lid, had lost its function. In general it has been believed for many years that a paralyzed nerve is relaxed. After many years of observation and experimental work, it was demonstrated that a paralyzed nerve was under a great tension. Treatment which relieved the tension and brought about a sufficient relaxation was a cure for the paralysis.

In Dr. Bates' book is an illustration of a patient with paralysis of the seventh nerve. One of the functions of the seventh nerve is to close the eyelid. When it is paralyzed, the eye remains open. Not only does the eye remain in this way, but the lips are separated. The patient is not able to close the lips sufficiently to whistle. By palming and swinging, a relaxation is obtained,—the patient becomes able at once to close the eyelid, and to close the lips sufficiently to whistle. These cases of paralysis do not need electrical or other stimulation. They are cured by rest. I believe that electricity is a valuable remedy, but it has lost much of its prestige by being employed in cases where it was not needed.

Georgie's mother has unusual intelligence and she came to us confident we could relieve or cure Georgie's eyes. This is the history of his case as she described it: When he was born his right eye was wide open, and the child was unable to close the eye. About three months later the eyelid closed, and the child was unable to open his eye. Several eye specialists in Brooklyn told the mother that the eye could not be cured.

From the very beginning, Georgie was a source of pleasure to me. He seldom spoke above a whisper and preferred to go through each treatment without speaking at all, if possible. At such times he was given the card with the letter E pointing in different directions. When I asked him which way the E's were pointing as I pointed to each one with my pencil, he would say left, right, up, down. But if he were not in the mood, he would raise his hand and indicate the direction in which the E was pointing. In the beginning this card was the only one used in his treatment, because he did not know all the letters of the alphabet. After he was admitted to the kindergarten school, he asked for the alphabet card, and also a figure card, which children favor a great deal for testing their sight. When Georgie's first test was made, he was unable to open his right eye. The left eye was normal, or 10/10.

I taught him to palm, and while he sat quietly, I began to talk to his mother. The conversation was solely for his benefit, so I talked about him. Like all mothers of her type, she praised her little boy and informed me of all the wonderful qualities of his mind, and that he was most obedient. I saw him smile, and for a moment he peeped a little through his fingers. After he had rested his eyes for ten minutes, I told him to keep his left eye covered, and look at the card with his right eye. His mother sat facing him, with her eyes wide open with astonishment, as she saw the eyelid open just a trifle. He was able to keep his right eye open long enough to read 10/70, then the eyelid dropped again. His mother obtained a number of different Snellen test cards and used them at home for the dally treatment of the paralyzed eye.

I treated Georgie again, one week later, and I immediately had him practice the palming. So many patients have failed to palm successfully, because they stare even with their eyes closed. Georgie palmed successfully because, at my suggestion, he remembered the things that were pleasant and easy to recall. If I could not think quickly enough of a story to tell him, I would show him something in my room, which pleased him. Then he would palm and describe it to me. At one time I showed him a box of bonbons, which were attractively arranged, and promised him some if he would sit and palm for a long time. His mother and I were amused, because he was unusually quiet when he remembered the candy. After he had palmed a while, I suddenly asked him what he was thinking about. He opened his eyes long enough to say the word "candy" and then closed them again. The vision of his right eye improved from 10/70 to 10/50 that day, and the eyelid was more open than before. The left eye improved to 12/10.

At every visit his vision was improved, while the paralysis diminished with the increased relaxation of his eye. I noticed that occasionally he would forget to blink, and then he would stare and strain, which

lowered his vision and increased the paralysis. His eyelid has opened more and his vision has improved since he became the owner of a little puppy. Whenever he played with the little dog, his mother noticed that both eyes would blink. This is evidence that things seen in motion are seen best. The vision of his right eye was improved to more than 10/10, while that of his left eye to 18/10, which is very unusual in a child six years of age. He had been under my treatment for about a year.

### PARALYSIS OF AN EYE MUSCLE

One of our patients was an old colored mammy who came all dressed up with a faded red rose in her hat, which was gray with age. Her white apron was starched so stiff that it rustled every time she moved and she walked very slowly with the aid of a cane. When I asked her what her name was she answered, "Mah name is Annabelle Washington Lee."

Poor mammy had squint in her left eye and evidently was in pain. When I asked what her age was she answered: "Now, Ah don't know, ma'am, just 'zackly, but mebbly Ah is fifty and mebbly Ah is sebenty. But Ah do know Ah's cross-eyed and man head hab sech pain Ah can't sleep nohow."

Dr. Bates examined her eyes, stated that she had a hemorrhage of the brain, and suggested that resting her eyes would be the best treatment for her. Mammy had a strong desire to talk and before I could tell her that we had no time for conversation she said: "You know, ma'am, Ah sees you twice. Yes'm, Ah sees de letters twice, Funny, but you hab two heads."

Then mammy laughed. Finally she sat quietly with both hands covering her eyes as she was directed. I began to praise her to other patients who were not willing to palm more than a minute or two, when all of a sudden mammy's hands dropped to her lap and we found her fast asleep. The joke was on me all right. Mammy practiced palming faithfully at home, however, and the third time she came to the clinic, Dr. Bates examined her eyes again. He said that the hemorrhage must have been cured by palming or keeping her eyes closed a great deal, for the retina was entirely clear and there seemed to be no more trouble.

Mammy's eyes soon became straight and she no longer complained about seeing double. The last time I saw her she said: "Ma'am, de world is bery different since mah eyes is better and Ah wants to smile all de time."

Mammy would do anything for me but read the card. I really believed her when she said, "Ah is plum lazy and Ah jes don' care 'bout readin', nohow; Ah gets along bery well widout it."

The best she was able to do for me with the test card was 12/20 with each eye, whereas in the beginning her squinting eye was 12/70 and the other eye 12/40.

### SARAH

Little curly-haired Sarah, aged twelve years, was a very interesting case. As she stood among patients who were waiting for treatment, I noticed how pretty she was. She was standing sideways with her right side toward me, and as I did not see her enter the room, I received a shock upon discovering that the left side of her face was distorted. She deemed so sensitive that I pretended not to notice anything wrong. Her left eye appeared ready to pop out of its socket any moment, and both upper and lower eyelids were terribly inflamed.

Dr. Bates explained the history of her case, and the cause of her affliction, and then left her entirely in my care. She told me that at the age of four, owing to an attack of cerebro-spinal meningitis, the left side of her body had become paralyzed. Until she came to us she had been receiving treatment from nerve specialists; both in England, where she was born, and also in New York. Electric treatments were given without success. Money was not spared; her family sacrificed every penny for medical treatment to bring about Sarah's cure. When one doctor failed, another was recommended by their friends. Finally the family bank account dwindled, and Sarah stopped treatment, believing that she could never be cured.

Later, as I learned to know her better, I noticed that she was ever conscious of her trouble and would always turn the good side of her face toward me. For one thing, Sarah was never downhearted. She was a good scholar and graduated at fourteen from the public school.

I tested her sight and found that she had normal vision, 10/10, with her right eye, and 10/50 with the left.



Placing her in a comfortable position, I showed her how to palm and told her not to remove her hands from her eyes while I was testing the sight of other patients. After a few minutes I noticed that while Sarah had her eyes covered her face became terribly red, and I wondered if she were comfortable. I spoke to her and she complained that she did not like to palm, that it made her nervous.

I thought that she was not doing it right and explained to her again how easy it was. To cover her eyes with the palms of her hands would help her to obtain the relaxation which was necessary to improve the condition of her left eye. She faithfully tried again but I noticed that she was getting more uncomfortable all the time. Since her vision failed to improve by palming, I tried the long swing, which proved successful.

I thought that in time Sarah would become able to palm with benefit and thus improve faster, but I was mistaken. For two years Sarah came to us at the clinic quite regularly, but in all that time I could not induce her to palm. She insisted that it made her nervous. In all the years that I have been assisting Dr. Bates, this was my first experience with a patient who could not be made comfortable by palming.

#### Alternative treatments applied when palming was not successful.

However, the slow swing of her head was very helpful to her. **She held her left forefinger in front or to the left side of her face, about six inches from her eyes, and then slowly moved her head from shoulder to shoulder, blinking all the time.** At the first visit the vision of her left eye had improved to 10/30. Sarah was encouraged to practice the swing as many times during the day as it was possible for her to do so, and she was reminded to blink her eyes often, which she was not able to do at all with her left eye at the first visit. The upper lid of her left eye seemed stationary, and she could not close this eye even in sleep, a condition which gave her a strange appearance.

As I never had a case like hers before, I was deeply interested and studied hard to find every possible way to help her. She was a dear, bright little girl and was willing to do everything that we wished to help in the cure of her eye. I asked Dr. Bates for permission to try to improve the condition of her left cheek and mouth, as well as her eye, thinking that our method of relaxation might possibly do something for her face. Doctor smiled and said, "Well, you might try."

On Sarah's second visit to the clinic her left eye had improved to 10/15, which was most encouraging to me. She told me that she had tried to palm at home just to please me, but every time she tried, it made her strain. The swing, however, helped a lot. As time went on, I told her to shorten the swing and move her head slowly from side to side, seeing everything move opposite from the way her head was moving. This also gave her a great deal of benefit. She had had a month's treatment when I noticed that the upper lid of her left eye was beginning to move, and that the inflammation, which caused Sarah so much discomfort, had almost entirely disappeared. Her vision stayed about the same, left 10/15, right 10/10.

At each visit, we went through the usual treatment of seeing things move opposite, as she held her left forefinger to the left side or in front of her face. I sat before Sarah, going through the treatment with her, to encourage her to keep it up. During a period of eight weeks of this practice, her facial expression changed for the better. It was more noticeable when she smiled. When I first saw her, I observed that her mouth used to stretch over to the right side of her face.

Sarah seldom missed a clinic day, and she was very faithful in her treatment at home. Within a year's time, she became able to smile with her mouth almost straight. I decided to try out a few ideas of my own, and suggested to her that a mirror might be of benefit in helping her to speak and smile, with her mouth held straight all the time. This would help her to watch her mouth while she was talking or studying her lessons. I told her to go into a room by herself and practice for at least an hour every day. She was to study her lessons and recite poetry out loud, while looking at herself in the mirror. She was to see how straight she could keep her mouth during the performance.

As Sarah did not like palming, I had difficulty in getting her to imagine things perfectly with her eyes closed. I asked her to remember, while at school, how she appeared while looking in the mirror reciting her lessons. I was amazed at the result, and so were Sarah's friends, as well as herself.

She obtained the imagination of mental pictures by following my directions; for instance, I always asked her to repeat the alphabet very slowly every clinic day. After a while she became able to pronounce each letter of the alphabet with her mouth perfectly straight. She could never do this correctly unless she blinked her eyes for each letter. This may sound silly to the reader, but when Sarah did not blink before repeating a letter after me, she stared, and not only did she say the letter with her mouth crooked, but her left eye would bulge almost out of its socket.

Sarah noticed this wonderful improvement and very often had a surprise for me when she came. One



day we were late for the clinic, but there was Sarah, sitting patiently with the rest, eager to tell me of some wonderful trick she was able to do. When her turn came, she whispered in my ear, "What do you think I can do now? I can wiggle my left ear." It sounded so funny that I wanted to laugh, but Sarah was serious about it and I dared not. Strange to say, when I asked her to do it for me, before she did the swing, without first closing and opening her eyes, she was unable to move her ear. But when she started to move her head slowly from left to right, and began to blink, she wiggled her left ear, which greatly amused the kiddies awaiting treatment. Two years had passed and Sarah still had hopes that we could cure her, and her mother and father were very grateful because of her improved condition.

On one visit she had a sty on the upper lid of the left eye. When I remarked it, she explained that she had been troubled with sties for many years, and at times they were very painful. I spoke to Dr. Bates about it, and he prescribed eye drops and salve, which gave her some relief, but the sties appeared again from time to time. At my suggestion, Sarah acquired the habit of closing her eyes frequently day or night, while she was awake, and was permanently relieved. She believed, as I did, that rest and relaxation helped in getting rid of the sties altogether.

At school one day, in the corridor, she passed a former teacher who had not seen Sarah for a year or more. She stopped and asked if she were not a sister to Sarah. "Why, no," the girl answered, "I am Sarah." The teacher looked at her in astonishment and said; "I did not know you, dear; your smile is so different, and your left eye looks so much better." Sarah told her about Dr. Bates and his method of curing people without glasses.

This teacher had had progressive myopia for many years, and suffered greatly with her eyes. What Sarah told her did not at the time convince her that she might also be cured, but about six months later sixteen girls from her class-room came to us at the clinic for eye treatment. When she saw that their glasses had been removed from their eyes, and that they had improved faster in their studies, she called to see Dr. Bates at his office. In less than a year's time, she herself was able to see without glasses.

Every clinic day Sarah repeated the letters of the alphabet faithfully, until she could say them with her mouth perfectly straight. Then one day she had another surprise for me,—for the first time in her life she had learned to whistle with her mouth straight! What a wonderful stunt that was for Sarah. This she could not do unless she first practiced the swing. Rest or relaxation always relieves tension of the body as well as the eyes. I wish to emphasize the value of rest and relaxation, obtained by the swing and by blinking, in relieving or curing all diseases of the eye, no matter what the cause may be.

My experience in the treatment of this case demonstrated that many popular theories of the cause of paralysis of the motor nerves are wrong. For example, it is generally believed that when a motor nerve ceases to function properly, the recovery cannot take place until some disease or organic condition is relieved. Sarah became able to close her eyes quickly almost completely, after practicing the swing, which she could not have done if the paralysis of the nerves had been of a permanent nature.

I am aware that cerebro-spinal meningitis is caused by a germ, which is an important factor in the destruction of the nerves controlling the muscles of the eye and face. I do not think that anybody will maintain that the swing had anything to do, directly or indirectly, with the germs of the disease, or with the results of the inflammation caused by the germs.

My experience with the treatment of other cases of paralysis of the muscles of the eyes, caused by infection, confirms my belief that the paralysis is not due so much to local changes in the nerves as it is to mental causes. Sarah was pronounced incurable by many prominent nerve specialists. I believe that one reason why local treatment did not help her was because she had no trouble with the nerves sufficient to produce the paralysis. The only treatment which helped her was mental relaxation obtained by the swing. It was the strain of her mind which produced all the symptoms of paralysis. When her mind was at rest she suffered no more trouble.

## CHAPTER VIII

### CATARACT

#### CATARACT - Cases Nos. 1 and 2

MANY times I have been asked, "Is it really possible to cure cataract by Dr. Bates' method?" I can prove that it is. In the March, 1920, number of "Better Eyesight," I wrote about a case of cataract under treatment at the Harlem Hospital Clinic. This case was a woman, seventy-three years old, who was determined to be cured without an operation. In October, 1916, she had visited another dispensary where an operation was advised. The doctors there told her, however, that she must wait until the cataract was ripe before the operation could be performed. Later she heard about Dr. Bates curing cataract without an operation, and tried out the method as well as she could all by herself. In March, 1919, she visited Dr. Bates in his office, and he helped her.

This woman made her living by mending clothes in an orphanage, so we were glad to treat her in the clinic where she did not have to pay. Three days a week she came, no matter how bad the weather was.

On her first visit, she read the forty line at four feet from the test card, then her vision blurred. She knew just what to do, and I did not have to tell her to palm. Just once she peeped at me through her fingers and said, "I'll fool the other doctors yet. My eyes won't have any cataract if I keep this up." She kept her eyes covered for about ten minutes, and when she read the test card again, her vision had improved to the twenty line, or 4/20. On another day she read 5/20. In June, three months after her first visit, her vision had improved to 8/15.

She became able to thread a needle without any trouble and never put on her glasses again. We did not see her during the summer, but she returned again in September of the same year. Her vision had improved to 8/10 with both eyes. I asked her if she had practiced with the test card while she was in the country. Her answer was: "I should say I did."

After a year she came to our private clinic. In the room were two school nurses and a young man, who were there to observe the cases under treatment. I was not sure that my dear old lady had retained her improved vision, because I had not seen her for so long a time. I placed the test card ten feet from her eyes, and she read every letter correctly, up to the fifteen line, without the aid of palming. At times she read 10/10, after resting her eyes with the aid of palming and blinking.

The test I made this day was the best, because she read a strange card which she had never seen before. Then I placed her in the sun and gave her the doctor's fine-print card, which she held six inches from her eyes. She looked at me in a funny way, and said, "Oh, I can read that easily." Then to the amazement of the others in the room, she proceeded to read the diamond type.

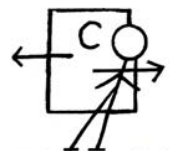
Some day I am afraid the little lady will get into trouble. Whenever she sees a child in the street wearing glasses, she becomes much excited. One day she stopped two women with a child on the street and found fault with them because the little girl, three years of age, was wearing glasses. "Why don't you take that child to my doctor; he can cure her without glasses!"

Those who know our dear old lady can very well understand her good intentions, but how about the mother and friend of this little girl? They must have thought at first that she was of unsound mind, but they treated her kindly and accepted the "Better Eyesight Magazine", which she offered them.

We had another case of cataract under treatment at the clinic, a man sixty-three years old. When he first came, he had to have someone lead him. After his fourth visit to the clinic, he was able to travel by himself.

When Dr. Bates examined him with the retinoscope on the first day, he could see no red reflex in either eye. I gave him a test card which he held very close to his eyes, and after he had palmed for a little while and imagined that he saw the test card moving opposite to the movement of his body, he could make out the big C of the card at two inches from his eyes, but it looked very much blurred to him. Before he left the clinic that day, he was able to read several lines of the test card, and the letters cleared up, a result which, of course, gave him a great deal of encouragement. What helped him so quickly was his certainty that we could improve his sight. He did exactly as he was told. Keeping up a steady swing of his body, slow and easy, without any effort, stopped the staring. Palming, and imagining that his body was moving, were also a rest and relaxation.

After he had been coming for a month or more, he was able to read all the letters of the test card, as he held the card very close to his eyes. Three months later he was able to read the large letters of the card two feet away, and the ten-line letters of the bottom line at three inches from his eyes. Whenever



Swing (sway) left and right in front of the card. Flash the letter C. Notice the card moves in the opposite direction.

he came, which was every Saturday morning, he had something encouraging to tell us. The signs in the subway, cars, and on the street grew clearer and more distinct. He was able to dodge people in a crowd. At the present time, even people with normal vision have to be careful to avoid injury both in the street and in the subway.

On his last visit he read very fine print at three inches, and saw the fifty-line letters more than a foot away. His vision improved by practicing with print even finer than diamond type. Throughout the treatments his jolly disposition proved an asset.

It is a great relief to be able to say to a clinic patient when he first comes to us: "You are welcome here for treatment, no matter where you live." Each district has a free hospital, and those who live in another district are not admitted: At the Harlem Hospital Clinic, the authorities turned away many poor souls who needed treatment for their eyes. While it was pitiful, it was necessary, because we could not take care of them all.

### **CATARACT - Case No. 3**

A friend of mine once asked me if I ever got tired of clinic work, of treating obstinate cases. No, indeed, I do not. The harder a case is to benefit, the better I like the work. I never tire of my patients, though I get tired myself.

Mothers of the clinic are restful to me. I love to treat them. To see tenderness, expressions of love, come to their faces always brings a perfect mental picture of the Madonna to my mind. When Mother Jones comes, she gives me that picture.

Her first visit was on November 1st, 1924. She brought with her a note written by her pastor, stating that as Dr. Bates had cured many of his friends, he was sure we could do something for Mother Jones. Her age was sixty-seven and she was troubled with cataract in both eyes. Her vision had become defective about four years ago. Dr. Bates' examination with the ophthalmoscope showed a red reflex in the right eye, but none in the left.

After Dr. Bates had left the room, Mother Jones began to talk. As long as I live I shall always remember the sound of her voice. When I compared her with the Madonna, I was not trying to give the impression that Mother Jones is beautiful of face or form. She is of the ordinary motherly type. But the impression one receives while looking at her, listening to her tender voice, suggests something holy. She did not know of anyone who had been benefited by the Bates method, but her pastor had sent her, and that was recommendation enough. She is very poor, but her son and family are taking care of her. When I told her that the only way for her to be cured was to practice faithfully every day and to do exactly as she was told, she promised to do her part. When I tested her sight with the test card, she read 10/70 with both eyes together. Her vision with the right eye was 10/70, but she could not see the card at all with the left eye at ten feet.

She was instructed to palm and to think of something pleasant, something easy to remember. I left her by herself for about ten minutes, and when I returned she had not stirred, and her eyes were still covered with the palms of her hands. I told her to keep her right eye covered, but to open her left eye and tell me what she could see. I held the test card five inches from her left eye, and at that distance she saw the 200-line letter C. She sighed with relief when she discovered that her left eye was not really blind, but was made so by strain and tension. In this short time the benefit she received from palming proved to her that her cataract was caused by strain.

I placed her in the sun, and while her eyes were closed, I used the sun-glass on her eyelids. I could see her relax, and she smiled as she felt the warmth of the sun's rays. I led her back to her chair and told her to open her eyes and read the test card. Her vision had improved to 10/30, reading with both eyes. She was instructed to practice ten minutes many times every day, alternately palming, blinking, and flashing letters on the test card.

Mother Jones came once a week without missing a treatment, and each time her vision improved, with but two exceptions, when it remained the same as on the previous visit. On her second visit she read 10/30 after palming, and on the third treatment 10/20.

This dear mother appreciated the sunshine more than any cataract case I ever had. On dark and rainy days, she was always despondent and nervous, but the sound of her voice never changed. Once when she failed to appear for treatment, I feared she was ill, and I worried about her. I had noticed that her clothes were none too warm for the cold days, and thought perhaps that was the reason for her absence.

While I was reflecting upon my bank account, I received a letter from a private patient who is also

one of my adopted mothers. She comes from Ohio, where I have many friends. Her gratitude for the benefit she received from Dr. Bates prompted her to send a sum of money to be used in making my clinic family happy. A poor mother with a big family, dear old "Pop," who lives in a home for the blind, and Mother Jones shared in the loving thoughts of my mother from the West.

Mother Jones soon returned to thank me for the gift and to explain why she had been absent,—her son had become a father, and both the mother and baby were doing finely. After I expressed my congratulations over this great event, I produced a test card which she had not seen before, and placed it ten feet from her eyes. Some of our readers may doubt it, but I do believe that the little stranger had something to do with the improvement in the vision of her grandmother. She read 10/20 with her left eye.

Soon afterward, I was called upon to take charge of our private practice, because of the illness of Dr. Bates. Captain Price of London, who is practicing the Bates system successfully in his country, was in our office at the time and offered to help me and my assistant, Miss Mildred Shepard. I placed Mother Jones in his care. His record of her improved vision showed on February 7, 1925, right vision of the white C card, 10/20; left vision, 10/20. At her second treatment by Captain Price, her right vision was 10/15, left vision 10/15, when reading white letters on black card.

Ophthalmologists would certainly appreciate this record, if they would only study and practice the Bates system. What further proof is necessary to convince those of pessimistic minds that our method of curing people without glasses is a purely scientific one?

Mother Jones is still under treatment, but it will not be long before she will enjoy normal sight. She tells everyone how much better she sees and feels, since she has learned how to relax and relieve her eyestrain.

#### **CATARACT - Case No. 4**

Another interesting patient was a man, aged forty. On his first visit I found him palming, which was an unusual thing for a stranger to do. He evidently thought that if covering the eyes with the palms of the hands was good for others, it might help him also. I stood before him and asked: "Can I help you?"

He paid no attention to me whatever, and I soon discovered that he was quite deaf; so deaf that one had to raise the voice considerably to make him hear. When at last I succeeded in making him understand me, he asked: "Is it possible that you will be able to do anything for me?"

I answered: "I am going to try, with your help."

Then I said I wanted to know something about the history of his case, and this is what he told me:

At the age of six he fell down a flight of stairs, and struck his forehead on a newel post, severing an artery in the head. Later, when it was noted that his sight was deficient, physicians attributed the condition to this fall. During the thirty-four subsequent years he had been treated by many New York physicians, both at their offices and clinics. During that period he had been blind three times, and surgical treatment had been repeatedly necessary. As a boy he could never see a blackboard at school and could read but little. Between his twenty-first and thirty-fifth years his sight had been steadily declining, and several doctors had told him that this would continue until he became completely blind. He was now practically blind in one eye so far as useful vision was concerned. I tested his sight and found that he could count his fingers at about three feet with the right eye, and with the left he could see only the movement of his hand. Dr. Bates examined him, and found that he had an inflammatory cataract in the left eye, together with other inflammatory conditions.

I told him to palm again, and he complained that he saw all sorts of bright colors when he covered his eyes with his hands, and that these disturbed him very much. I directed him to remove his hands from his eyes and look at the large letter C on the test card, which I held a foot away from him. After he had tried a few times his vision improved, and he was able to remember the letter with his eyes closed; then the bright colors faded away, and after palming for fifteen minutes his vision improved from 1/200 to 1/50 in the right eye, while with the left he became able to count my fingers at three feet. The next clinic day he read 3/30 with the right eye and 1/10 with the left, while at the end of two weeks the vision of the right eye was 3/10 and the left 3/70. At the same time his general health was so much better that he asked me if I had time to let him tell me about it. I replied that I should be very glad to hear the story.

"For many years," he related, "I have suffered from insomnia, and in recent months it has been nothing unusual for me to remain awake the entire night. Frequently I stayed up all night, realizing the futility of trying to induce sleep. A short time ago this happened twice in a single week. When I did

sleep, my slumber was very light and disturbed by the wildest imaginable dreams—fires, murders, hair-breadth escapes. As a result of the insomnia and eyestrain I frequently had splitting headaches, sometimes every day, and sometimes even twice a day. From these I could secure relief only by the use of what I knew to be harmful medicines. Since I came to you I have been sleeping very much better, the dreams have become less disturbing, and the headaches have practically ceased."

Hearing this, I was encouraged to try to do even more for him, so I handed him a test card, and asked him to look at a small letter, close his eyes and remember it, and then imagine it blacker and clearer than he saw it. He was able to do this, and the constant twitching of his eyelids ceased. For a moment I forgot that he was deaf and said in an even voice:

"How do your eyes feel now?"

He heard me, and answered:

"They feel so rested just now I do not feel that I have eyes at all, but am seeing without them."

(Headaches, ear ringing, deafness, insomnia, nightmares, blur cured)

He came three days every week for three months, and then as he improved, he came less frequently. When I last saw him he was able, with his left eye, to read 3/10 at times, and with his right 5/10, while his hearing had improved so much that I was able to talk without raising my voice much above my ordinary conversational tone. At the same time he had been relieved of head noises, including a drumming in the ears, which, he said, had often continued from three to ten days. When he first came he could not go about alone, and walked like an intoxicated person. In the beginning when he left the clinic, I noticed that he bumped against the benches, and he told me that the condition had been attributed by physicians whom he had consulted to incipient locomotor ataxia. After his first visit, however, he never bumped into the furniture, and before he left us his walk was almost normal.

### CATARACT - Case No. 5

An old mammy, who remembered the Civil War very well, but did not remember when she was born, had cataracts in both eyes. Her condition was so bad in the beginning that she could not see anything on the test card beyond three feet with either eye. When she was told to palm, she looked around the room, observing several patients who were palming, and then remarked:

"Good Lor', ma'am, dis here room looks like a prayer meetin', and beleeb me, Ah's ready to join in, too."

(Eyestrain causes cataract, palming cures cataract.)

Her vision improved at the first visit to 10/200, and in flashes she read 10/100. This amused as well as pleased her, and she would have it that palming, alone, did not improve her vision. She was sure I had done something mysterious to her, while she had her eyes closed, which caused this wonderful miracle. No amount of explaining to her would make her understand that eyestrain, which caused her cataract, was lessened by palming. Every clinic day she was there without fail, and her vision improved to 10/30. She had been coming to us for several months.

She had the saddest-looking eyes, and even when she smiled, she looked sad. I found out after we became acquainted, that she had a reason for her sadness. The story she told me was almost unbelievable, but I shall repeat just what she said:

(Black slave lady gives birth to baby. Baby is born with the same scars the mother has on her body from the slave owner's whip.)

"You know, ma'am, a long time ago Ah had a master, and he was good and kind. Den came a new master, and he was bad to de help. Dey was twenty ob us in help, and we did work on de plantation. After a while Ah was sick, and was becomin' weary, 'cause a li'l stranger was on de way. De sun was hot in de fields, ma'am, an' mah back was achin' powerful bad. De old master would sure hab sent me to bed, but de new one he just tells me to get a move on. One day Ah felt so bad an' hungry dat Ah falls down on mah knees. Ah jes' couldn't get up. De master beat me wid a lash right before de oder niggers to teach dem a lesson, and said Ah was jes' lazy. When mah little boy was born, he did hab de stripes ob de lash on his back de same as was on mah own back. One night Ah ran away wid mah baby, an' this was jes' before de niggers was freed bah Lincoln."

I wondered if my mammy had been told the story of Uncle Tom's Cabin, or if her story were partly true. She looked very old, and I judged, as did Dr. Bates, that she was about eighty years of age. It was remarkable what a good memory she had for some things. I asked her several questions on different days to confuse or to test her, but she was always correct in her answers.

She continued with the treatments until she became able to thread her needle without glasses, and then she stopped coming.

### **CATARACT - Case No. 6**

An old-fashioned mammy negress, aged seventy-two, was being treated for cataract in both her eyes. An operation was advised, but she was fully convinced that we could help her so that she would not need an operation. At first she could just make out the seventy line of the card with each eye at ten feet. The first treatment improved her vision to 10/40. She was directed to do a great deal of palming and swinging every day, and a week later she read 10/20.

Incidentally, I can prove that eyestrain caused her cataract, for one day she was sufficiently relaxed to read some of the letters on the bottom line of the card, 10/10 temporarily. It was a joy to talk to her, because she was clean and neatly dressed. Her manner was apologetic, and she was grateful for the benefit she received. Another day I noticed that her eyes were swollen from weeping. She was eager to please me, and started to read the card, without success. She turned towards me and said: "Ma'am, I cannot read. The card is all blurred, and I cannot see one letter clearly." Then she began to cry softly, and told me her trouble.

"Many nights I have not slept," she said, "because my son was sent to prison. He is not bad, but he got into mischief."

She loved her boy very much, so she did not tell me the nature of the trouble. But oh, how she strained and suffered for him! I wish I could have told him all about it; I think he would have been sorry. While she palmed I comforted her and reminded her that everything might be much worse. She was under a tension all the while she palmed, but after a while she became more calm and I saw her relax. As she again removed her hands from her eyes to read the card, she exclaimed with relief:

"My, how the letters clear up! What did you do to me? I feel so much better now."

I told her that she did it all herself. At each visit she showed a little more improvement, until she soon became able to read and sew, and to read very fine type at six inches, in a poor light, as well as in a bright light. In less than one year the opacities of the lens disappeared.

[Reading fine print in the sunlight and dim light, with relaxation, without strain cures cataract.](#)

### **CATARACT - Case No. 7**

#### **AUNT MARY**

For a year I have been treating a woman, aged sixty-eight, who has cataract in both eyes. In the beginning, I saw her about once a week, then later, I treated her less frequently because I had so little time. She lives with her sister and family in the country and every one who knows her, calls her Aunt Mary. She has all the reason in the world to be depressed or unhappy, because, with the exception of just a few years, she has been a cripple all of her life. Yet Aunt Mary greets you with a smile and makes you understand that she is happy.

A few years ago, her sight began to trouble her, and she was examined by an eye specialist. He said that cataract was beginning to form in each eye, and that nothing could be done until they became ripe, when she was to be taken to the hospital for an operation. Then I was consulted by her family and asked to call at her home and examine her eyes. With the retinoscope, I saw a clear, red reflex in the right eye, but none in the left. It was evident that her trouble was caused by strain, and her condition was becoming worse because she worried about the outcome.

We placed her in a comfortable chair in the garden where the sun was shining, and fastened a white test card on the trunk of a tree. As she looked at the card, she began to squint, because the bright light bothered her. Teaching her to blink often, helped her to look at the card with less discomfort. She could read 10/200 with the right eye and 1/200 with the left, which means that at ten feet the only letter she could see with the right eye was the large letter C on the top of the card, and with the left eye, she could not see it further than one foot. With some difficulty, Aunt Mary was able to raise one of her arms, so that she could cover her eyes with her palm. She had a good imagination, so while her eyes were covered, we talked about various kinds of flowers she had seen. We also talked of white clouds and a blue sky. As I mentioned one object after another, her mind did not dwell on one thing very long. I spent about an hour with her the first day, and her vision in that time improved to 10/40 with the right eye and 10/200 with the left. Improving her imagination of things she had seen, with eyes closed as

well as with them open, was the only method I used that day.

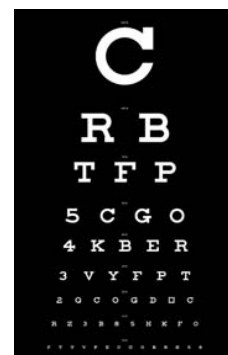
There was quite an improvement in her eyes when I saw her again. The vision of her right eye improved to 10/30 and 10/70 in the left. It was impossible for her to stand and swing, so I placed myself before her in an arm chair, moved my body and head to the right, then to the left with a slow movement, and asked her to do the same. While we were doing this, I could not understand why she did not see nor imagine things about her moving opposite to the direction in which her head and eyes were moving. Then I noticed that she was staring while trying to follow my directions, even though she was blinking. It did not take her very long to learn how to shift her eyes, and after that she made steady progress.

Dr. Bates became interested in Aunt Mary's case and offered to call with me the next time I treated her. He examined her eyes with his ophthalmoscope and said there was not enough opacity of either lens to lower the vision. She was very much encouraged when Dr. Bates told her that her cataract had improved. He also remarked about her cheery disposition, and how her faithfulness in keeping up her daily treatment would help greatly in the cure of her eyes.

There is an enclosed porch where she practices on rainy days, or when it becomes too cold to sit in the garden. Her loving family do all they possibly can to make her comfortable, so there is every chance that she will be cured of her eye trouble.

Aunt Mary did not like to practice with the white C card because the white background bothered her and made her strain. She likes to practice with the white letter card on a black background, so we use the black card mostly during the treatment. In her sunny room hangs a picture which is beautifully colored, but she could not see it clearly. She explained that it seemed to be always in a mist. I gave her fine print to practice with, and she has become able to read it at six inches from her eyes in a fairly good light.

Her confidence in me makes me all the more anxious to cure her. In the last few months, she has realized the fact that no operation for the removal of cataract will ever be necessary, if she continues to practice. She surprised me one day by reading 10/20 with both eyes, and after sun treatment she read 10/15. Surely, at this time, if her cataracts were as bad as they were in the beginning, when I first saw her, her vision would not have improved, neither would she have responded to the sun treatment. Recently, I examined her again with the retinoscope, and I saw a red reflex in the left eye, as well as in the right.



A neighbor, who is twenty years younger than Aunt Mary, and has presbyopia or old age sight, was surprised to find out that Aunt Mary had better sight than she had. The fact that her vision was better than a woman so much younger made her anxious to practice more. The last time I visited Aunt Mary, she read the bottom line of the test card at ten feet, or 10/10, with her right eye and 10/20 with the left. She reads the fine print now at all times, also the newspaper and her Bible without any trouble. When she strains to see at the distance, things seem to blur before her eyes, but when she palms and sways her body, as she sits in her chair, the mist clears away, and she sees better.

When I first became acquainted with her, I noticed how difficult it was for her to move about with her crutches. To get up from her chair was an effort. Not so long ago, I offered to help her change her position, but she managed very nicely herself and got up with the aid of her crutches without any effort at all. I believe the constant practice of the body swing has not only improved the condition of her eyes, but also her general condition.

## JOCKY

The following report of the relief of congenital blindness involves not only cataract but disease of the retina with no perception of light. According to the accepted teachings of ophthalmology, there would have been no relief for the child, and he would have been condemned to a life of blindness, a burden to himself, his family, and the state.

It was during the year of 1920 that Jocky, aged three, became my patient. A man and a woman on the last lap of life's journey accompanied him, and I learned later they were his grandparents. His father and mother had died of influenza soon after he was born.

After the doctor had examined the boy's eyes, he asked me to watch carefully to see if the little fellow would follow his hand, as he passed it from side to side close to his eyes. Poor Jocky paid no



attention whatever to the proceedings, for he did not see the hand at all. He could see nothing. He was blind, and had been so from birth. Dr. Bates could not perceive a red reflex in either eye with the ophthalmoscope. Breathlessly the grandmother exclaimed:

"Isn't there any hope at all, Doctor, please? Oh, say there is!" Poor woman! There seemed indeed little room for hope. The pupils of the child's eyes were filled with a white mass plainly visible to the naked eye. Dr. Bates said that before birth an inflammation of the iris and the interior coats of the eyeball must have occurred. This had not only caused the formation of the cataract, but destroyed the sensitiveness of the retina, so that the removal of the cataracts would have done no good. The Doctor did not promise anything—he never does. He always studies each case that comes to him and then directs me what to do. He explained to the grandparents how necessary it was for Jocky to rest his eyes. Then I showed the grandmother how he could do this.

It was not easy for Jocky to rest. He was never still. Every nerve in his body seemed to be straining. But with infinite patience his grandmother taught him to palm and encouraged him to make a game of it.

"Where is Jocky now?" she would ask.

Then he would cover his closed eyes with his chubby hands, shut out all light, and say: "Jocky gone away."

When his grandmother observed that the little fellow was really beginning to see things placed before him, she worked unceasingly with him every day.

Jocky enjoyed playing the game of palming, and the two would keep it up for hours. Even by himself, when he became tired of his other games he would cover his closed eyes with the palms of his hands and journey elsewhere in his imagination. When he removed his hands from his eyes, he could always see better, and this naturally encouraged him to continue the game. He also enjoyed joining hands with his grandmother, or grandfather, and swinging. The practice helped his sight very much. He did not know his letters at first, but his grandmother soon taught him, with the help of the test card.

After a few months of this treatment Jocky had made the most astonishing progress. The area occupied by the cataracts grew smaller and smaller, until one pupil was half clear and the other partially so. Jocky began to go out by himself and to play with other children. At the clinic, after he had palmed awhile, his grandmother would ask him to go and find the good nurse who had been so kind to him when he first came, and he would go straight to her. Then she would ask him to find Dr. Bates and he would go straight to him. This always thrilled the nurses and doctors who were watching. He would also go to a little girl-patient with cross eyes, and the two had great fun swinging together.

Some time later a clinic attendant informed the grandparents that Jocky could not come to the clinic any more, because he did not live in the district of the Harlem Hospital. Our little Jocky, however, was not forsaken on that account. He became a steady visitor to the doctor's office, where he was always made welcome.

No patient who ever attended the clinic was more missed than Jocky when his visits ceased. As he lived a distance away he did not come three days a week, like the other children, but when he was present he was a ray of sunshine. His cunning ways endeared him to everybody, while his wonderful progress inspired confidence in the treatment and encouraged young and old to practice more industriously. He understood what we were trying to do for him, and tried to help us all he could. Whenever he saw Dr. Bates coming towards him, he would put his hands over his closed eyes, and say, over and over:

"Jocky gone away, Doctor. See! Jocky gone away."

## **CHAPTER IX**

### **BLINDNESS**

#### **A BLIND BOY**

He was only twelve years old, and blind. His name was Lewis and he was of Jewish birth. If Lewis had been born blind he would not have had so many plans about the future, nor would he have been so sad.

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

disease of the left ear.

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

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

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

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

Of course the mother heart was crying out for help, and it was pitiable to hear her. I tried to explain that we would do everything possible for her boy, but I could not get a word in edgeways. I closed my eyes for a few moments and prayed for help.

I then spoke to Lewis as though he could see me and placed a test card in his hands, advising him to keep his eyes closed and relax in his chair as much as possible while he was doing this. I told him that it was necessary not to worry nor to think of his blindness. He could think of a sunset, he said, also a white cloud in a blue sky. With just a few minutes of this treatment, he opened his eyes and saw that the card was white.

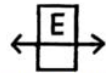
I had him close his eyes again quickly and asked him to remember the whiteness of drifted snow. He said he could remember or imagine that he saw the snow, but he could imagine a white cloud much whiter. I said, all right, keep remembering the white cloud, but imagine it is moving. He said he could do that easily. After a half hour or more, Lewis opened his eyes and flashed a big black spot on the top of the card. I said: "If you will move a card slightly from side to side, you will be able to see what the black spot is on the top of the card." Another half hour passed by, both of us doing our best, when all of a sudden my patient said, "It is a letter C!"

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

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

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

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



**Move the card  
side to side,  
Flash the letters.  
Rock, Swing,  
Blink, Sunlight,**

## A HOSPITAL PATIENT

During the hot summer days while we were still treating patients at the Harlem Hospital Clinic, a little girl named Estelle, about eight years of age, was brought in and placed in the children's ward. She had met with an accident which destroyed the sight of her left eye. Not being a clinic case, she was taken in charge by another doctor, who came to our room a few weeks later and asked Dr. Bates when he expected to take a vacation.

Dr. Bates answered: "I take a vacation every day. Why do you ask?"

The other doctor answered: "But I am serious; when do you go away for a rest?"

Dr. Bates replied: "When I am treating my patients it rests me, so I don't have to go away. Is there anything I can do for you?"

"Yes," said he. "There is a little girl in the children's ward upstairs, and while I am away I should like to have you take care of her case. When I return I shall remove the injured eye, for it is in bad shape and the sight is completely destroyed."

Dr. Bates agreed to care for the little girl, and asked me to help him. We called on Estelle, and the nurse in charge of the ward led the way to the tiny cot in a far corner of the room. Rows upon rows of cots we passed and on each lay a young child. Some of them were the dearest little pickaninnies imaginable. A number were crying with pain, while others looked wistful.

My heart ached for them in their loneliness, away from their mothers, I glanced at the doctor's face and I could see that he, too, felt sorry for the little ones.

Finally the nurse stopped beside Estelle's cot, and the poor child looked very much frightened as the doctor and I came along. We could see only part of her face because the whole left side was covered with a bandage. Before Dr. Bates could say a word she began to cry and beg the new doctor please not to hurt her, as the other doctor did. The nurse began to remonstrate with her, but the doctor soon quieted her when he promised in his gentle way that he would not hurt her in any way. She stopped weeping instantly when the doctor asked her if she would like to see how really funny she looked in a mirror. Was there ever a girl or woman who did not want to see herself in a glass? Estelle answered: "But I haven't any mirror."

"Oh!" said the doctor, "Mrs. Lierman always carries one in her purse."

I produced it quickly, before the child lost interest. As she held the mirror and looked at her bandaged face, I noticed that the nurse was bored; doubtless regarding this as a waste of time. She had other duties, of course, but Dr. Bates believes in taking his time, and he surely did on this occasion. He directed the child to remove the adhesive plaster herself, and in this way the bandage was removed without discomfort or pain. After he had examined the eye, which was almost healed, he turned to the nurse and asked: "Why on earth is this child kept in bed?" The nurse answered: "Because of the injury to her eye."

"So I see," said the doctor, "but the rest of her body is not sick or injured. Why can't she get up and walk around here?"

The nurse replied: "But I am obeying the doctor's orders."

"All right," said Dr. Bates. "I have charge of her case now, and I think she ought to be out of bed."

Before the nurse could explain that the child would have to be dressed, he put out his arms toward Estelle and she reached toward him with a smile. He lifted her gently out of bed, and as she readily gave him her hand, both walked slowly down the length of the ward. But, coming back, she ran. Of course her steps were uncertain, for she had been in bed for two weeks, and was weak, but she had full confidence in the big doctor who held her hand so tightly. What a funny sight she was, in bare feet, a smile, and practically nothing else. The nurse looked on disdainfully, but I must confess that I giggled.

The other children in the ward became interested in the game of the doctor and Estelle. There was a grand exodus of most of the children from their beds, who were anxious to join in the fun. During this time Estelle was so happy that she screamed with delight, while the other children added their voices to the riot. For fully ten minutes the nurses had a lively time getting their young patients settled again.

Back to the other end of the ward, ran poor little Estelle, with Dr. Bates trotting beside her. Returning, the doctor stopped by a cot where a baby lay swathed in bandages from head to foot. She had been horribly burned. Neither of her tiny hands was free to hold a doll or toy. Over in a corner of the room was a box containing all sorts of toys.

At the doctor's suggestion Estelle produced a dolly from the box and held it up so that the poor baby could see it. Her moans changed to smiles and in an instant two little girls forgot their pain.

To go back to Estelle's trouble. She told us how she had been playing on the sidewalk near her home

when she slipped and fell against the curbstone. A piece of broken glass lay in her path, and it penetrated through her upper closed eyelid and cut the eye so badly that the sight was destroyed completely. Dr. Bates treated the eye later so that it did not have to be removed. Even though she could see out of only one eye, no one observing her would have suspected that the sight was destroyed in the left eye. Both Estelle and her mother were very grateful to us, and at every visit Estelle would fill the doctor's pockets with fruit and candy, which she was eager to share with the big doctor who never hurt her.

### **SHOCK CAUSES BLINDNESS**

On July 16, 1923, we treated a man whose blindness was caused by a sudden shock. As I stood before him and asked him what his trouble was, his eyes looked up toward the ceiling and immediately I knew that he could not see me. He had been sent to us in the hope that Dr. Bates would be able to restore his sight. Previous to his visit on that day, I had received a telephone message from a woman employed by the Compensation Bureau of the City of New York, telling me that he was blind and, in the opinion of eye specialists who had been consulted, incurable. Dr. Bates examined his eyes with the ophthalmoscope and found that he had atrophy of the optic nerve and that he was under a terrible tension.

With each eye separately he could see the 200 line letter of the test card at one foot temporarily. He could do this only in flashes, because he stared continuously, which blinded him. The variable swing improved his vision to 6/200 and his field as well. He came daily to the office for treatment, and on the 21st of July he read 9/20 after he had palmed his eyes for a long time. Sun gazing outdoors helped his vision also. His general depression became less and he informed me that he was feeling much better after each office visit. For a long time he did not have much to say, but after he had become better acquainted with us, he began to talk about his case. He had been working in the moving picture studios for some years, and apparently he had felt no discomfort in his eyes. In describing the accident, he said:

"I was standing on the top rung of a ladder readjusting electrical parts used in the studio for taking moving pictures. At the time there was just an ordinary light, such as is used in most offices. Without my knowing it, a strong Kleig light was suddenly turned on me and I received a sudden shock which caused blindness instantly. I was cared for, as are other employees in the studio, and then was taken home. Since then I have not been able to work. It seemed as though my troubles were multiplied when my little baby boy took sick and died. I had no money with which to bury him until my wife's parents came to our aid. Christmas came, with no hope of Christmas cheer for my other child, a little girl just three years old. We were in debt, but I had planned, when I was able to work again, to pay back the money which was used to bury my baby. My wife tried to console me and make me feel that things were not so bad, but I saw no hope ahead of me on account of my blindness."

We felt it the more imperative that our patient be given all the treatment possible in order to restore his sight, and we worked diligently all through the fall and winter, with good results.

During the month of May we had many rainy days with little sun. This patient demonstrated to us that the sun is necessary for the eyes, for during all the months of almost daily treatment he had not had such poor vision as he had while there was no sun. His vision was lowered to 10/50, and he became very much discouraged. After the sun had shone for a day, he came to the office feeling light-hearted and happy. He was given the sun treatment and immediately his vision improved to almost normal—he could read 10/10 at times. The doctor questioned his ability to dodge automobiles at the crossings. His answer was that he could get along very well on bright days when the sun was shining, but that he still feared the traffic on rainy days. While this conversation was going on, the patient was looking intently at the doctor's face as he stood about three feet away. He did not move an eyelash, but just stared all the while he talked; he had forgotten the very thing that helped him—blinking. All of a sudden he exclaimed:

"Doctor, now as I look at you, you haven't any head."

"No?" the doctor replied. "Seems to me, the other day somebody told me I did have a head. But you never can tell, some people don't always tell the truth."

Immediately the patient apologized and hastened to say: "Oh! but Doctor, when I come close enough to you, I can see that you have a head."

Dr. Bates has always advocated the movies. Whenever a patient stares, he advises him to go to the movies. We owe a great deal to the moving picture artists, for much of their work is done under

unfavorable conditions. The Kleig light, while it is powerful, is not injurious to the eyes of the actors and actresses when their eyes are properly used. Most of them work under a terrible tension, with the feeling that their eyes will be injured by the strong glare. A great many eye specialists no doubt have treated injury to the eyes apparently caused by the Kleig light. The light would be harmless if those who work in the studios could keep their minds relaxed, and if they could also understand and use our method—resting the eyes all day long.

Dr. Bates discovered many years ago the benefit of strong light on the eyes, and I have seen many patients cured by the sun treatment alone. Some of these cases were seriously affected because of their inability to stand even the rays of the sun. It is curious but true, that this patient was benefited mostly by a magnifying glass which focused the light of the sun on the white part of each eye, as he looked down while the upper lid was raised. At the beginning of his treatment, the mere mention of light would cause him to frown and shrink with fear. Later he enjoyed sitting in the sun all day long. He was grateful for what had been done for his eyes, and insisted upon my writing to two of our most popular actresses of the screen, who were interested in his case.



## TWO BLIND GIRLS ROSALIE

In response to a doctor's request, I agreed to help two blind girls, Eleanor, aged sixteen, and Rosalie, seventeen.

Dr. Bates examined their eyes with the ophthalmoscope and found that Eleanor had myopia in the right eye and atrophy of the optic nerve in the left eye, a condition which is seldom, if ever, cured. Both eyes were badly inflamed.

Rosalie had retinitis pigmentosa in both eyes, and could not count fingers in an ordinary light. In a strong light she could at times count fingers if held close to her eyes. Rosalie would cure anyone of the blues because she wore a constant smile. She had black curly hair and olive skin. I held a conversation with her for a few minutes in order to get acquainted, and also to watch her eyes. The first thing that I noticed was that she stared and kept both eyes open all the while. I did not see her blink once. She had a habit of talking rapidly, and I observed that she moved her eyes from side to side at about the same rate that she spoke. This is called nystagmus. I held the pot hooks card with the letter E of different sizes, pointing in various directions, close to her eyes, and she said I was holding something white before her.

I asked, "Do you see anything else on the card?"

"No," she answered.

Then I placed the palms of her hands over her closed eyelids and told her that this was palming and that it was necessary to remember agreeable things. She said that she could easily remember her music. I could well believe that, because she already had a good reputation as a pianist, having won the district bronze medal, the highest reward she could obtain in her school. After she had palmed for ten minutes, I held the test card close to her eyes and asked her what she saw. She said that the white card was covered with black spots. Quickly I told her to palm again for a short time. After about five minutes she looked at the card again, and this time recognized the large E of the 200 line. We all rejoiced, because the rapid movement of her eyes from side to side had stopped temporarily.

Then I placed the card on my desk about a foot away from her, and had her palm again. When she opened her eyes later she saw the 100 line letters.

The next time she came I placed her two feet away from the card. After palming a short time she read the 70 line letters. She palmed again, and this time her vision improved to 2/50.

The chaperon for the two girls did not realize that it was possible for Rosalie to read the alphabet or to read figures, and, at my suggestion, she taught Rosalie. Her vision improved after six visits to 1/40 for the Pot Hooks, the letter, and figure cards. The nystagmus had disappeared permanently.

## ELEANOR

Eleanor's vision with each eye was 3/100. Her vision was improved by palming and the long swing. She could make out figures much easier than letters, so I placed the figure test card at five feet from her eyes. While she was moving her body from left to right, she was told to glance at the figure at which I was pointing. She was cautioned not to look at the figure longer than a second, otherwise she would be tempted to stare, and her vision would be lowered. She practiced this for a few minutes and her vision with both eyes improved to 5/50. Her left eye, which had atrophy, was greatly relieved by the sun treatment.

Every time she came for treatment, which was usually once a week, her vision improved for another line of the test card. Changing cards helped to improve her vision also. After the regular C card was used, we tried the pot hooks card. Eleanor never had anything to say, but did just as she was told. When her vision improved and she became able to read small letters and figures, she would smile and become very much excited. In one week's time her vision improved to 6/20 with both eyes. Then I gave her small type, called diamond type, and asked her to hold it six inches from her eyes. She could see black spots on the little card, but nothing more. I gave her the sun treatment for a few seconds, and she immediately read the fine print.

Later I placed a black card with white letters ten feet away and noticed that Eleanor turned her head over to one side in order to read the letters. The distance of only one foot further caused her to strain while trying to read the strange card. I directed her to swing and blink as she flashed the white letter. In less than a half hour, she read the letters one line after another with her head perfectly straight. She was given the sun treatment about six times in one hour, and was encouraged to read the card after each treatment, and before she left me her vision had improved to 6/15.

I did not see her again for a few weeks, and I feared that she would not get along so well by herself. At her next visit, however, she surprised me by reading all the different cards with which she had practiced, and she held her head perfectly straight. Her vision had improved to 6/10. Eleanor plays the violin and sings. When I guided her in reading the card with her head straight, I always reminded her of her violin and how well she played those selections which she knew. This never failed to improve her vision.

Eleanor and Rosalie left the city and I did not see them again.

## DEAR OLD POP (The Previously Blind Barber)

### WHAT PALMING AND EXERCISE DID FOR A BLIND MAN

I hope and trust that my friends will forgive me for not waiting until my patient could see better, or until I was able to accomplish more for him. In this particular case I feel very much like a child, eager to tell all about him even though he was not cured.

During the month of November, 1921, a dear old man came to our clinic, led by a younger man. They had been told by the clerk that the patient could not receive treatment there because he did not live in the district.

However, the nurse in charge did not send him away, but asked him to wait. After all our patients had been attended to, Dr. Bates had a talk with the old gentleman.

Upon examination it was found that he had all sorts of trouble with the nerves and muscles of his eyes. Dr. Bates asked me to examine him and suggest what we could do for him, where we could treat him. There he was, absolutely with no sight whatever, but with a smile that went straight to my heart. As the old man held his head up, waiting to hear what we had to say, I made up my mind to treat him at our office. Every moment of my time is taken up with the work, but there was my lunch hour before the clinic every Saturday that I could devote to his case.

I had not the slightest idea that we could give him even perception of light, for his eyes were in bad shape. No iris whatever nor pupil in either eye was visible. Instead, each eye had a thick, solid-looking white mass where the iris and pupil should be. That day we arranged that he should come to see me every Saturday, and I was to treat him for one hour. I made no promises, but said that I would do all I could for him, if he would do his part and carry out the treatment at home.

His age was seventy-four, and he lived in the Home for the Blind in Brooklyn. He was first stricken

with blindness in the left eye in the year 1889, and the trouble was neuralgia. In 1898 he was stricken with blindness in the right eye after suffering with chills and fever. From 1898 he could see slightly with the left eye, until 1920, when his sight gave out completely. He had been treated by noted eye specialists without success.

The first week in December he came to our office and without thinking he said, "I am very happy to see you," and I answered promptly, "And I am happy to see you, also." I found that he was under a terrible tension. The muscles of his arms, especially at the elbows, were so tense that I made up my mind that he must go through some calisthenics with me before we started with the treatment.

I called him "Pop" from the start, and he seemed to like it. Well, you should have seen the poor old fellow throw his hands over his head and try to touch the floor without bending his knees. Of course he got only half way, as his hands just about reached to his knees. Nevertheless, it was a good start. We were very serious in our exercises, and to make it appear doubly so to him, I went through the exercises with him, guiding him as best I could. I taught him how to palm and to swing his body from side to side as I stood before him, explaining that the swing would help him to relax. While holding his hands I reminded him always to loosen up at the elbows. I told him that anyone could see that he was blind because he stared so much. He never seemed to close his eyes, which made his condition worse. So the next thing I taught him was to open and close his eyes often, which we call blinking.

The next time I saw him he was overjoyed. "I have so much to tell you. At times I can see just for a second," he said. "The other day, as I went to the washroom I did not feel for the wash basin, but I saw it and walked over to it. Then in my happiness and excitement my vision left me. Why was that, please?" I answered, "You began to strain and caused your blindness to return." I encouraged him by saying, "Don't worry, you will be able to see more next time when you are able to stop the strain."

Then, to my surprise, I learned that this dear old fellow had been shaving men's faces by the sense of touch. Before he became blind he was an expert barber. He repeats again and again how he shaved a Spanish prince by the name of Don Carlos and also his staff, as well as other notable men.

Next time he came he was even more interesting. He could not wait to tell me how young he felt and how he loved to exercise. He gave me a demonstration of how he could touch the floor with his fingertips without bending his knees. I was just in the act of praising him for his ability to do such a remarkable trick for a man of his age, when all of a sudden there was an accident, and a button went flying to the opposite side of the room. It burst from the back of his trousers as he touched the floor with his fingertips, and poor old "Pop" was more embarrassed than I was.

However, we soon remedied the trouble and started in with our treatment. As he had no perception of light in the beginning, I was quite thrilled when he pointed to both windows of our room and showed me just where the curtains were fastened. Placing him in another part of the room, I was delighted when he pointed with his fingers to a sunbeam shining on the rug. With this progress to encourage me, I worked earnestly to give him his greatest desire—his eyesight. I cannot understand as yet just how he did see, but I noticed that the white mass in front of the iris was not quite so thick as formerly. At another time he told me that while he was shaving a man, he suddenly saw the man's face and that he also saw walking past him, another man, who had entered the room quietly. He told me that at another time as the matron of the home passed out of his room, he asked, "Isn't your gown a blueish gray?" "Yes," she answered, "it is a blueish gray color. Your sight must be coming back."

What poor old "Pop" is most anxious about is that he may have the pleasure of seeing my face some day. But, of course, I merely tell him that he must not hope too seriously to see my face, for it might make him blind again.

There was an air of true refinement about him, and I was always anxious for the hour on Saturdays to be with him and help him.

As I became better acquainted with him, I encouraged him to talk. He was always cheerful when he came and tried to follow me in everything I directed him to do. As he told me a little of his personal affairs, he was very careful not to arouse pity. Even though he lived in the Home for the Blind he felt quite independent. He stated that the only sadness he has had in his life was when his wife no longer wanted him. That was when he lost his eyesight and could not support her. Before she died, she lost all her earthly possessions. All he wished now was to have enough sight to enable him to work and really see the faces of his many friends.

Pop enjoyed standing and swinging his body from side to side, and as his eyes moved with the body swing, he relaxed and got flashes of a black stone he had in his gold ring. He said that the stone became perfectly black to him and then he was able to flash the gold setting. One day he entered the smoking-room at the Home and for the first time since he became blind, he saw the outline of all the men in the room a few feet away from him. I was happy to hear this because heretofore a person had

to be quite close before he could see his outline.

We worked together diligently month after month, hoping that he would surprise me some day and actually see. All things are possible and I have not lost hope. One day he said, "I know I am going to see again, for once in a while I see my whole hand, but it looks like a baby's hand. When I go out in the street, I can see the brass railing attached to our front steps. I can see a man's face now, when I am shaving him, but I see his face a gray color instead of pink or flesh color."

My chief concern was to keep up his interest and encourage him to practice faithfully. In order to earn a few pennies, he caned chairs in the work shop. While doing this work he stared, and that was a drawback, yet I had not the heart to stop him from earning his spending money. After a day of this kind of work he complained of seeing bright colors before his eyes, which indicated that he strained while caning his chairs. For quite a few weeks he was not employed in this way, so he practiced more faithfully than ever. I believe the sun treatment helped very much. This was given him, if it happened to be a sunny day, every time he came to the office. He was placed in the sun and while he was looking down, his upper lid was raised and the sun was focused on the sclera, or white part of the eye with the sun glass. At home, he would place himself in the sun and treat his eyes in the same way, only not with a sun glass. This treatment, in addition to palming and the body swing, helped a great deal.

Then came a wonderful change in his left eye, which in the beginning looked much worse than the right eye. The solid white mass which covered the pupil and iris gradually decreased. The upper part of the iris and pupil became visible in the left eye. The constant twitching of his eyes ceased. If I could have been with him more, and reminded him not to stare, I believe that the relaxation and rest would have restored his eyesight.

Week after week he kept coming, with always the same cheery greeting, "I am glad to see you, Ma'am." I became acquainted well enough with him to say, "Now, you big bluffer, you know right well you don't see me." This remark would always bring a hearty "Ha, ha" from him and then we would proceed earnestly with the treatment.

The last two months of the year 1924 I noticed that he was becoming more feeble, and that he was not so sure of his steps as he walked along with his guide, a boy of fourteen years. Recently he asked me a question which was indeed hard to answer. It was this: "When do you think I will see again? In six months or so?" Before I answered I watched him and thought perhaps that within six months he would be called to his Heavenly Home where there are no eye troubles, so I said, "Well, I don't know for sure, but wouldn't it be great if you would see again in six months?" It would be hard to tell of all the things he has promised me when that time comes. His favorite expression at the office, whenever he suddenly discovered a sunbeam on the carpet was, "Chee Rusalem, dat's great!" Then, in excitement, as his vision faded away the next moment, he asked, "Why don't I keep on seeing?" There was always the same answer, for there was only one reason, strain. When he held the test card five inches from his eyes after palming for a few minutes, he was able to see black spots on the card instead of letters. He showed me the outline of the large black letter C at the top of the card.

One day he exclaimed: "This week the Matron came into my room and while I palmed my eyes, she read something from a magazine to me. I laid down my pipe on a table before I palmed and after she left my room, I forgot all about my pipe. Later on, as I passed by the table, I saw the pipe plainly and picked it up. I called out to my friends in the next room and told them about this wonderful thing.

**When I shave a man now I can really see his face sometimes."**

He called me his Shining Light, bless his heart. It thrills me to hear this and makes me want to do greater things.

### THE BLIND GIRL

During the month of August, 1922, Dr. Bates and I were extremely busy and had to turn away many patients. A blind girl, aged 25, was waiting with her sister for attention. When I asked what I could do for her, she mentioned the name of a doctor's wife who had been treated successfully for cataract by Dr. Bates. A dozen or more patients who were in the waiting room at the time listened, for she talked loud enough to be heard. She said: "I came with great hope that you might help me to see." She then handed me a note written by the doctor's wife, which read something like this:

"You have benefited so many patients in your clinic, won't you please help this girl if you can? I met her in Prospect Park, Brooklyn, as she sat beside me on a bench, resting."

I am sorry to say that I frowned as I finished reading that note, for I did not see how I could possibly take another case, when I already had more than I could handle. The girl was not eligible for treatment



at the clinic because the authorities there would not allow us to take cases out of the hospital district. I was about to tell her that she would have to come some other time when I was not so busy, but I caught the anxious look in her face,—a look of hope, of faith. I solved the problem quickly and said, "I will take you this minute to our other office and see what I can do for you." At that moment, a gentleman sitting in the room sighed with relief, smiled, and said, "That was fine of you, knowing how rushed you are at present."

I disturbed Dr. Bates long enough to have him examine her eyes and to tell me whether there was any hope of her seeing at all. Dr. Bates said she had microphthalmos in both eyes. She had no red reflex from the pupils. A white membrane was visible in both pupils and the pupils were very small. She could distinguish light from darkness, but that was all. I asked her to tell me when her sight began to fail, or how long she had been blind. What a shock it was to me to hear her say, "I was born blind, so was my mother." What chance had I, if any, to ever help that poor girl to see even just a little of this, God's beautiful world? However, I started right in with the treatment, just as though she had sight. She had so much trouble with her poor eyes that I did not know where to begin. Her eyes moved rapidly from side to side, a condition called nystagmus. She also had a contraction of the throat muscles which caused a great deal of fatigue generally. Here was a big job ahead of me. I told her that I would do my best to help her if she would follow my directions.

Her sister, aged twelve, had normal vision and was called upon to help in the treatment. She proved later on to be a very good assistant. I asked the patient if her sense of touch was all right and she answered yes. Then I gave her an ordinary pin and told her to feel the size of it, then to feel the point and the head. She was told to palm and remember the touch of the pin.

She could remember the touch of the pin very well, she said, even though it was no longer in her hand. I was very much encouraged when, after a few minutes of palming, she removed her hands from her eyes and I noticed that the rapid movement of her eyes had stopped.

But when I asked her a personal question, the movement or nystagmus returned. I then told her to forget the question I had asked, and to cover her eyes again with her hands to rest them. While she was doing this I related what had been accomplished for an old blind man, who was at the present time under treatment. I explained how he once had good sight and now after several years of blindness and great suffering from eye operations, he was beginning to see. I watched my patient closely, and saw that she was interested in what I was saying. Again I told her to remove her hands from her eyes and I noticed the second time that her eyes were perfectly still. Her sister sat close by holding her breath in amazement and in an excited voice said to me: "This is wonderful. Anna has not been able to control that terrible movement of her eyes for years. I feel sure she is going to receive benefit from your treatment and care. I want very much to help you if you will tell me how."

It has always been my greatest desire to carry on Dr. Bates' ideas and methods and to follow faithfully his directions in all cases. I remembered something he said to me at one time. "If you have a pain, find out what causes it and cure the cause." So I felt in this case that perhaps if I could cure the nystagmus and the nervous contraction of her throat, I might be able to do more for her vision. Her sense of touch was good and her memory of the prick of the pin had helped while she rested her eyes. Now I decided to try the swing and see if that would help her throat. I told her to put up her forefinger and to hold it about six inches from her eyes, then to turn her head slowly from side to side toward the right shoulder and then toward the left. I explained to her that even though she could not see the finger, "she could imagine she saw it. She answered me just as I wanted her to, saying, "Oh, I can imagine the size of my finger, and when I turn my head to the right my finger seems to move to the left and vice versa."



I encouraged her to keep on moving her head from side to side and to blink her eyes to prevent staring, which had been a habit since birth. I noticed that after a few minutes or so she settled herself in a more relaxed position as she sat in her chair. Then I called her sister's attention to the fact that the contraction of her throat muscles quieted down until they stopped.

When I handed her a test card and asked her if she could see a letter on the card, she answered: "I cannot read letters, I do not know the alphabet. I can only read and write by the sense of touch with the Brail System." Here was another problem. Of course, there was the test card with large and small E's pointing in different directions, which could be used to test the sight, but I had other plans. I wanted Anna to learn to read and write and give up the Brail System entirely. Her sister was called upon to help. She was directed to cut out of cardboard, letters about the size and thickness of the big C on the test card. Then she was to paint them black and bring them with her the next time she came.

Her sister had good news for me when I saw them again. She had taught Anna some of the letters by the sense of touch. For instance, a letter T had a straight piece of cardboard at the top and another

straight piece through the center. A letter C was round with an opening to the right.

We had made a good start, I thought, on this, her fourth visit. I handed her a test card, blank side up. At first, she could not tell whether there was print on the card or not, because she was very much excited in describing how quickly she was learning the alphabet. This made her nervous and she strained. I got her busy with palming, and while she was doing this I told her a story. I find that all patients enjoy this, especially when they visualize or follow me closely in what I am saying. If I remember a good short story from a magazine, I tell that, or I might cite the case of a patient treated by me who obtained good results.

After Anna had rested and relaxed for ten minutes, I asked her to remove her hands from her eyes and look at the card. She remarked: "It appears all white to me. There seems to be no print on the card at all." I told her she was right. I then turned the card right side out, and as she did the long swing of her body, moving her head with her shoulders from side to side and blinking her eyes with the movement of her body, she pointed to the 200 line letter on the card in her hand and said, "That's a letter C."

Can any one imagine the extent of my happiness? For twenty-five years she had been blind, born so, and never had had more than a slight perception of light. Her sister forgot where she was and screamed, "My sister can see!" Anna and I cried with joy. We did not talk, just held each other's hands, I whispered to her ear,

"Anna, thank God with me, will you?"

"Yes, you bet," says she, "I'm doing that now."

We got busy again, and this time I told her to move the card from side to side, and imagine her body swinging opposite. She kept this up for several minutes and then she saw the R and B of the 100 line of letters.

On September 9, 1922, after one month's treatment, her vision had improved considerably for the test card. She had to hold the card about an inch from her eyes in order to see the letters. She was directed to place her finger under the letter which she tried to see, then to move her head slowly from left to right and in this way she saw the letters of the 70 line, one at a time. Before Anna left the office that day she said she had wonderful news for me. While walking in the street with her sister she saw moving objects for the first time in her life. In Brooklyn the trolley cars have an entrance in the center of the car. Anna was able to see this from the sidewalk and when a car passed by told her sister just what kind it was. She actually saw a letter-box fastened to a lamp post, and walked towards it without assistance to place a letter in the box. Later, Anna's sister cut out figures from one to ten, of cardboard, and she learned to distinguish them by the sense of touch.



On September 16, 1922, she began to read the 50 line letters of the test card at one inch from her eyes. The first on that line is a figure five. Anna puzzled over that for awhile and then she said, "The first one does not look like a letter at all; it looks very much like a figure five, sister has made cardboard for me."

I cannot express in writing how happy she felt when she realized that she had seen the figure five correctly. I placed myself in the sun and immediately she saw a beaded medallion on my gown and also remarked how my necklace sparkled in the sun.

The next thing was to teach her colors. As she never had more than a slight perception of light, the difference between bright red and bright green meant nothing to her. One day while walking with her sister, Anna stopped in front of a store where electrical supplies were displayed. In one section of this shop window was an electric heater and in the center of it was a red light. Anna drew her sister's attention to this and remarked, "Isn't that an angry looking thing?" When she related this to me she said, "I can get a pretty good mental picture of Satan now, since I saw that angry light."

By September 30th, she had learned all the letters of the alphabet and all the figures. Her sister patiently taught her various colors, so we had many things to work with in helping Anna to restore her sight. Much of our success in her treatment I owe to her sister Ella.

I had been in the habit of calling Anna my blind girl, or my blind patient, but I had to cure myself of the habit because Anna can now see. Her vision is not normal by any means. No one could expect that, not if one had seen Anna at the beginning of her treatment. People who have had fairly good sight and then acquired cataract and other diseases of their eyes have a fair chance or a better chance to regain normal vision than those who are born blind. I have seen many such cases entirely cured after they had intelligently carried out our treatment. But Anna, who was not only born blind, with cataract, but had

also acquired other diseases, was the greatest problem I ever had. I want to say this for her. If she had not had the faith in me or in my ability to benefit her, I could not have helped her. She always did as she was told. For instance, Anna was caning chairs for a living, a trade at which she could earn at least six dollars a week. But when I told her that she stared and strained her eyes while caning chairs, and that I feared she would be wasting her time and mine if she continued to do this work while under treatment, she gave it up. It was not easy for her to make this sacrifice, because she was renouncing her independence. Her great desire was not to be a burden on her family.

During the months of October and November, 1922, Anna made steady progress. She could read the test card up to the forty line at a foot or so from her eyes, but the smaller letters she read holding the card quite close to her face. She came every Saturday morning, accompanied by her sister Ella as usual. She was then going to the movies, and sitting about fifteen or twenty feet away. She could at times see the heads and faces of people on the screen. She had to keep up the body swing and also to blink constantly, otherwise everything before her became a blank. If she did not keep up the practice all the time, the staring and straining to see always lowered her vision.

During one of her treatments I had three visitors in our office whom I had invited especially to see the progress Anna was making. One of my visitors was a lady who happened to be in our waiting room the day Anna first appealed to me for help. This lady was a school teacher, a delightful person with a great deal of love for others. I placed her at a desk in one corner of the office, the desk separating her from the patient. To her left I placed a young man, a relative of hers who was also troubled with imperfect sight. To her right sat another young man who was at the time under treatment by Dr. Bates.

All objects seen by Anna on the street and elsewhere were viewed under favorable conditions, either in the bright sunlight or under strong electric light. While at the movie theatre, all lights being out, she was able to relax enough to see the objects thrown on the screen. Now, I was anxious to find out how much she could see as she entered the office, where I had purposely lessened the amount of light. As she stood in the doorway, I asked her if she saw anything unfamiliar in the room. Our visitors were perfectly still and intensely interested. Anna began to blink and swing her body from side to side, which was always a benefit to her. She looked about the room and then back again to the right where the visitors were sitting. She smiled and immediately walked unassisted to the desk, and as she kept up the blinking, she leaned over the desk and announced that the center figure was a lady with a light colored waist on,—there were two gentlemen also; one on either side of her. After praising her, I placed her in a chair to palm and rest her eyes for a little while. This was always necessary because in her eagerness to read or tell what she saw, she strained unconsciously and her vision blurred.

Ten minutes later I asked her to follow me about the room and describe what she saw. A Brazilian butterfly, in an oval frame hanging on the wall attracted her and at three feet she was able to see the color of it. As she had never seen a butterfly she tried to tell me what it might be. She remembered that at one time a butterfly had been described to her, so she said it might be one, although she was not sure. The memory of the form of an object explained to her really helped her to see it. She was placed before a mirror and immediately she saw what it was.

When I first saw Anna, I never dreamed that we could accomplish so much. In her home she helps with the housework and picks up things and places them where they belong. She sees the steam from the boiling tea kettle and reads the large head-lines and the next size type in the newspapers. When she first learned to write with crayon for me, she wrote something in a notebook which I hope to have photographed so that those who are interested may see what she learned to do. Perhaps not all blind patients could have accomplished what Anna did. Such an extraordinary mind as she has is very rare. Her cheerfulness, her hope of seeing, helped me to help her. Her smile was with her all the time and her gratitude to me and her faithful sister was unbounded.

She does not come for treatment any longer, but her letter of February 11, 1924, reads:

"My dear Mrs. Lierman:

It pleased me greatly to receive your letter  
and I appreciate your interest in me very much.  
I am not caning chairs any more, but am taking  
a commercial course.

With kindest regards, I remain,

Sincerely,  
ANNA BERNARD."

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## BETTER EYESIGHT

September 1927

### Perfect Sight

By William H. Bates

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

I. Many blind people are curable.

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

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

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

IV. Strain is relieved by relaxation.

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

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

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

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

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

## BETTER EYESIGHT

December 1927

### INSTRUCTIONS FOR HOME TREATMENT

By William H. Bates

The most important fact is to impress upon the patient the necessity of discarding his glasses. He is told that when glasses are used temporarily a relapse always follows and the patient loses for a short time, at least, everything that has been gained. If it is impossible or unnecessary for the patient to return at regular intervals for further treatment and supervision, he is given instructions for home practice to suit his individual case, and is asked to report his progress or difficulties at frequent intervals.

The importance of practicing certain parts of the routine treatment at all times, such as blinking, central-fixation, shifting and imagining stationary objects to be moving opposite to the movement of his head and eyes, is stressed. The normal eye does these things unconsciously, and the imperfect eye must at first practice them consciously until it becomes an unconscious habit.

The Natural Vision Improvement student practices, imitates these normal, natural eye functions (relaxed, natural, Correct Vision Habits) to gently coax the brain, eyes, eye muscles, body (visual system) back to normal, relaxed function and clear vision. Then, the eyes, brain... function correct, automatically 'on their own' maintaining clear vision. All of Dr. Bates 132 Better Eyesight Magazine Issues are in the Free E-Book.





## DR. BATES SUNLIGHT TREATMENTS (As described in Better Eyesight Magazine)

Shining direct sunlight on the sclera, the outer white part of the eye is a old treatment Dr. Bates applied to bring life, health, activity to the retina and its cells, cones, rods, nerves, blood vessels. Dr. Bates cured unclear vision and other eye problems, diseases with this treatment. People that were blind or almost blind would begin to see light and obtain clear vision as result of this treatment and other Bates activities.

### Directions

**1 - Face the sun with the eyes pupil directed away from the sun. Allow full spectrum sunlight to shine directly on the sclera, (white part of the eye) by pulling the upper eyelids up while looking down. The sun shines on the upper white area of the eye. The eyes pupil is down, under the lower eyelid to prevent direct sunlight from shining into the pupil.**

Move the eyes and head/face side to side to move the sunlight over the entire sclera and retina, lens through the sclera. Keep the sunlight moving on the sclera for a few seconds. Then stop, rest. Repeat if comfortable. Do not overdo it. Movement of the eyes, light places sunlight on all areas of the eye, retina, improves absorption, use of the light, activation of the retinas cells, light receptors... and prevents overexposure, concentration of the light, sunburn on the eye.

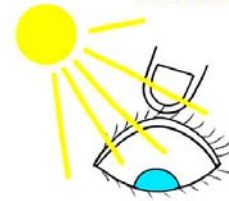
When pulling the eyelid; do not touch the eye or eyelid. Pull on the skin above the eyelid. Keep fingernails very short. Wash your hands first. Avoid chemical based soap. Do both eyes at the same time; left thumb pulls left lid, right thumb pulls right lid. Pull gently. This treatment also helps the eye build normal tolerance to sunlight, improves health and color of the sclera, perception of light, color, clarity of vision.

**2 - Now, direct the sunlight onto the bottom of the sclera; Pull the lower eyelids down, move the eye/pupil up in the opposite direction so the sun shines on the lower area of the sclera and not directly into the pupil.**

Move the eyes, head/face side to side. Keep the sunlight moving on the sclera for a few seconds. Then stop, rest. The head/body may need to be tilted back a bit to keep sunlight on the lower sclera and away from the pupil. Practicing this treatment repeatedly can tense the eye muscles and the pull of the fingers irritate the eyelids, skin. Use it occasionally.

#### Sunlight on the Sclera

Face the sun, the eyes pupil directed away from the sun.



1 - Pull the upper eyelid up and look down. Sunlight shines on the upper area of the Sclera. Sunlight does not shine into the pupil.



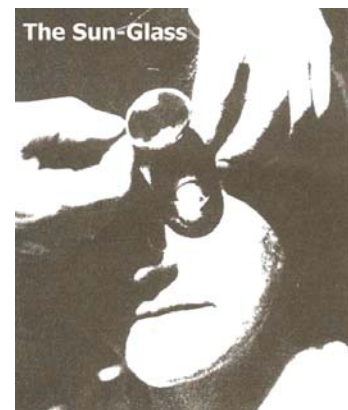
2 - Pull the lower eyelid down and look up. Sunlight shines on the lower area of the Sclera. Sunlight does not shine in the pupil.

Expose left and right eyes to the sun at the same time. Move the eyes left and right enabling the sun to shine/move on all areas of the Sclera.

### Sun-Glass Treatment

Dr. Bates cured advanced eye problems, blindness by the sunlight methods and, also applying the use of the Sunglass to increase the strength of the sunlight on the eyes sclera and retina through the sclera. He moves the sunlight through the Sunglass quickly over the sclera for only a second, few seconds. He also moves the sunlight through the Sunglass on/over closed eyelids. Light is not directed into the pupil. The light is kept in movement and moved quickly on the sclera and not for too long; only a few seconds in order to prevent over concentrating sunlight on any one or more areas of the eye, to prevent overexposure, sunburn on/in the eye. Distance of the glass must be correct or the eye can be burned.

The patient is exposed to plain sunlight first, without the glass to get the eyes adjusted to the light before using the sun-glass. Do not do this at home without an eye doctor's direction. Done incorrect, it can burn the eye.



## THE USE OF THE SUN GLASS

In using the sun glass, it is well to accustom the eyes of the patient to the strong light by having him sit in the sun with his eyes closed, and at the same time he should slowly move his head from side to side, in order to avoid discomfort from the heat. Enough light shines through the eyelid to cause some people a great deal of discomfort at first, but after a few hours' exposure in this way, they become able to gradually open their eyes to some extent without squeezing the lids. When this stage is reached, one can focus, with the aid of the sun glass, the light on the closed eyelids, which at first is very disagreeable. When the patient becomes able to open the eyes, he is directed to look as far down as possible, and in this way the pupil is protected by the lower lid. Then by gently lifting the upper lid, only the white part of the eye is exposed, while the sun's rays strike directly upon this part of the eyeball. The sun glass may then be used on the white part of the eye. Care should be taken to move the glass from side to side quickly. The length of time devoted to focusing the light on the white part of the eye is never longer than a few seconds. After such a treatment the patient almost immediately becomes able to open his eyes widely in the light.

Most Modern Natural Eyesight Improvement Teachers do not apply the Sunglass Treatment - (Mainly due to fear of the AMA.) Ophthalmologist Bates cured many vision problems, eye diseases, various types of blindness with the Sunglass and Sunlight, Sunning Treatments. Try plain Sunning, Sunlight first.

the Sunglass light is on the eyes.

**Start with eyes closed, look far down.** Bring the glass, light beam close, but a safe distance from the eye. **Move the light beam** on the white area of the eye through the eyelids. The movement helps to prevent too much heat. Test the intensity of the light, heat, distance of the glass... on the closed eyelids first. See the size of the light spot on the eye and the blood vessels... in the eyes sclera, retina. Keep the light moving, move it quickly on the sclera for a few seconds.

Then, **repeat with the eyes open;** still looking **far down,** eyes pupil under the lower eyelid, protected from the light; lift the upper eyelid, open the eyes and move the light quickly side to side, a few seconds on the white area, sclera of the eye. Then repeat the steps with the other eye.

The Sunglass is a glass. As described in other chapters; All glass, plastic.; eyeglasses, windows, sunglasses block out part of the sun's light spectrum causing unhealthy partial spectrum, unbalanced light to exit the glass and shine into the eyes, travel to the brain, body. This impairs health, function of the brain, body, eyes and clarity of vision. For this reason the sunglass is only used to get the cells, light receptors, capillaries... in the eye, retina, lens back to full life, activity, bring the vision back. Then the glass is not used. Plain sunlight not passing through glass is used by practicing Sunning, Sun-gazing... as described in this chapter.

Read more directions for Sunning, Sun-Gazing, Sunglass Treatments in the PDF Natural Eyesight Improvement E-book; Ophthalmologist Bates 'Better Eyesight Magazine' describes this treatment. See; Better Eyesight Magazine; April, May, June, August, October, December, 1926 and November, 1924 and

The Sunglass treatment is be done by a Bates Method Experienced Ophthalmologist and only if necessary in cases of blindness, extreme vision impairment and only after closed eyes sunning, daily sunlight exposure; eyes open (not staring into the sun), yes; looking at, shifting on the bright sunny sky, clouds, trees and other Bates Method Treatments have been tried first.

If these have not brought vision improvement, the Sunglass Treatment may.

Be aware that certain types of glass act as a magnifying glass. The Sunglass is a magnifier and sunlight passing through the Sunglass can burn the eye.

Only a professional should apply this method;

The glass is never still; the glass is moved continually side to side causing the light to move quickly on the white area of the eye. A short time; only a few seconds of light is placed on the eye. Do one eye at a time.

(Patch the eye not being worked upon with a white eyepatch to prevent the eye, pupil from moving into the light of the Sunglass. Keep the patch open on the outer side away from the glass to allow plain daylight into that eye to keep both brain hemispheres, eyes active. Do not wear any type of eyeglasses, contact lenses, sunglasses, tinted, UV blocking lenses when using the Sunglass, Sun-gazing, Sunning.)

Distance of the glass from the eye must be exact, a specific distance and the time the light is on the eye (white area, sclera only, through or under eyelids) must be brief, few seconds or the eye can be burned. It is a certain type of magnifying glass;

Type, size, thickness, curvature... of the glass, distance, angle from the eye, strength of the sun affects the strength, intensity, concentration of the light ray beam, heat of the sunlight through the glass. The heat increases with the amount of time the light is on the eye. The correct amount is relaxing, healthy for the eye. The light must never shine on/into the eyes pupil. Keep the light away from the pupil, iris. Keep the eye, pupil far down, under the lower lid to prevent the light beam from shining into the pupil. Do not move the eyes when

other 'Use of the Sunglass, Burning Glass' articles. Better Eyesight Magazine article June, 1926 in original form is shown on this page.

I place the instructions here due to the many cures Dr. Bates, Emily Lierman, Bates, other doctors obtained with the Sunglass and to enable persons to know if their Eye doctor is doing the treatment correct, safe.

**Sun-Gazing;** Looking into the sun with the eyes open, while moving the eyes, head/face side to side, keeping the eyes, head/face in movement 'shifting' is still done by some people in various countries, cultures. For sun-gazers that do look at the sun with the eyes open; Practice only for 5-10 seconds occasionally, always moving the head/face, eyes; shifting side to side, top and bottom... across the sun. Blink often. Never stare into the sun. Application time may vary with certain cultures, countries, treatments by experts.

Avoid areas where the sunlight is concentrated or the ozone layer is depleted.

Looking at the sun at sunrise, sunset in safe areas of the planet is allowed as long as staring, over-exposure is avoided. People have been looking at the sky, sunrise, sunset for millions of years.

Due to the depletion of the ozone layer, Modern Bates Teachers do not advise looking into the sun with the eyes open. Closed Eyes Sunning only is practiced.

Looking at the bright areas of the sky, clouds, tree tops with the eyes open on a sunny day is allowed.

Never look at or near the sun during a solar eclipse of the sun.

Good nutrition is necessary to maintain the eyes natural protection and tolerance to sunlight.

Sunlight through the eyes and on the skin is also necessary for the body to absorb, create, function with nutrients, vitamins, vitamin D, calcium., minerals, to help protect the eyes, skin from sunburn, overexposure to sunlight, to produce, balance, control hormones, chemicals in the brain, body, body organs, systems, including melatonin for a normal sleep cycle and serotonin, tryptophan... for a positive state of mind, good mood, positive thoughts, emotions. The eyes need sunlight to remain healthy, keep the vision clear.

Most drugs and some herbs impair the vision, eye health, natural tolerance, protection from over-exposure to sunlight.

Sunlight contains all colors, frequencies, energy of the light spectrum.



5. SUN TREATMENT. The eyes need sunlight. People who work in mines, where there is no sun, sooner or later develop inflammations of the interior of the eyes. The cloudiness of the lens from cataract is lessened by exposing the eye to the direct rays of the sun. When using the sun treatment, it is best to let the eyes become accustomed to the sun by mild treatment at first. Have the patient sit in a chair with his eyes closed and his face turned toward the sun. He should slowly move his head a short distance from side to side. The movement of the head prevents concentration of the sun's rays on one part of the eye. After some days of treatment, or when the patient becomes more accustomed to the light, one may use the sun-glass with added benefit. Direct the patient to look far down and while he does this, lift the upper lid gently, exposing to view the sclera or white part of the eye. Now, with the aid of the sun-glass focus the sunlight on the forehead or on the cheek, and then rapidly pass the concentrated light over various parts of the sclera. This requires less than a minute of time. It is

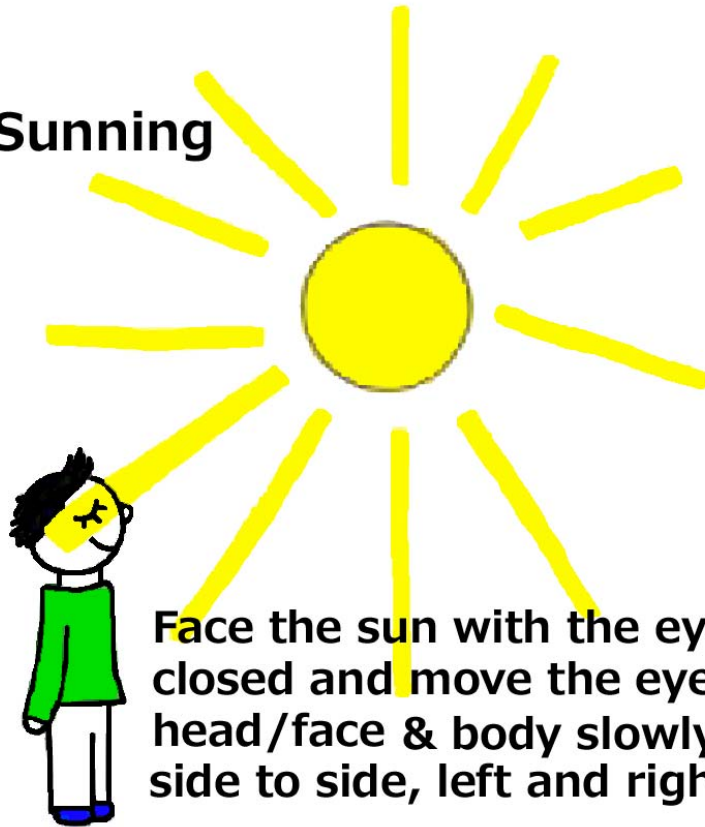
not well to be in a hurry. One should wait until the patient becomes sufficiently accustomed to the sun to permit the upper eyelid to be raised while he looks far down, exposing the sclera only. It is important that the patient be cautioned not to look directly at the sun.

#### *Prognosis*

The cure of cataract is usually accomplished more quickly than the cure of some other diseases of the eye. My assistant, Emily C. Lierman, has had unusual success in treating cataract cases, as she adapts my methods to each individual case. In her book, "Stories from the Clinic," the treatment is described in detail.



## Sunning



Face the sun with the eyes closed and move the eyes, head/face & body slowly side to side, left and right.

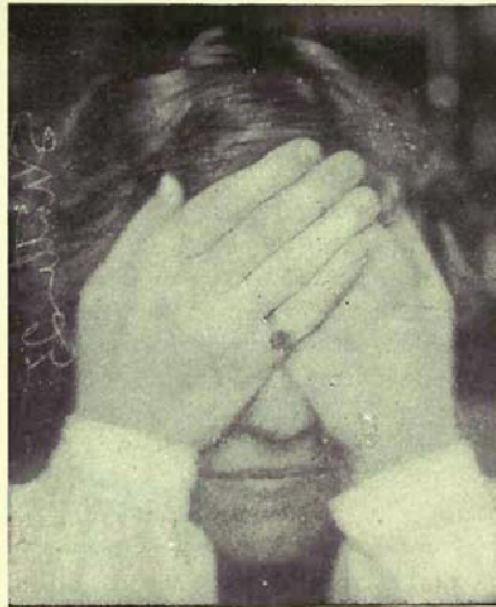
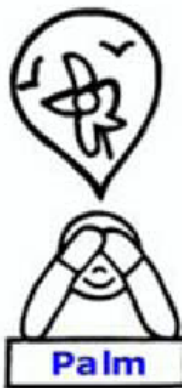


Fig. 42. Palming

This is one of the most effective methods of obtaining relaxation of all the sensory nerves.



**Palm and remember, shift on a favorite object: flower, colorful stone, jewelry, tree, land, old house... Improving the memory, imagination of clear mental pictures relaxes the mind, body, eyes and improves the vision.**



**Palm and imagine drifting down a river. See objects in color, clear, motion. Movement of the boat, water, wind, birds flying, sun shining, sparkling on the river, animals walking on the shore, colorful dragonflies... Imagine all the senses; touch, warmth of sun, feel the breeze, hear the water, birds, wind, taste your favorite drink...**

## Sunning Examples

Face the sun with the eyes closed and move the head/face slowly, relaxed side to side; left, right, left, right... Feel and see the sun move across the face/closed eyes. Then, move the head/face up and down, then circular; trace around the sun counter clockwise, clockwise. The eyes, head/face (and body) move together, at the same time, in the same direction.

Do the rock while sunning; Face the sun with the eyes closed and rock the entire body side to side, left and right. Do the long swing.

Sit facing the sun, relax, eyes closed and daydream pleasant thoughts. Occasionally move the head/face side to side.

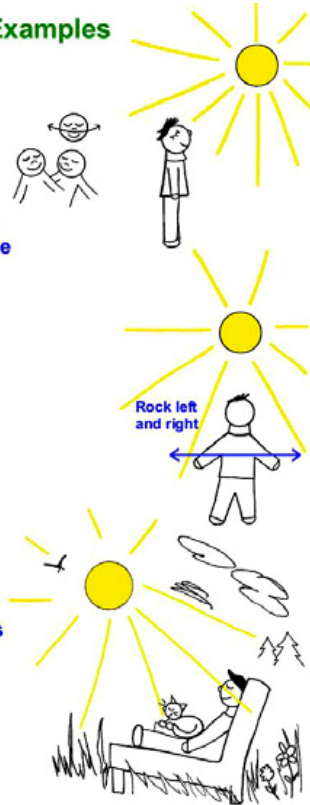
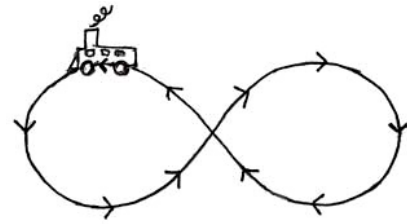
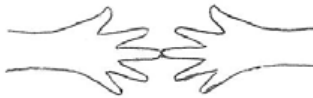
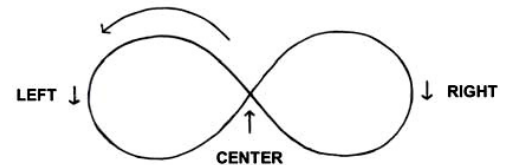


FIGURE EIGHT



THE FIGURE EIGHT



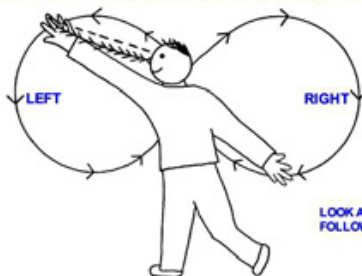
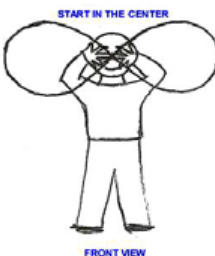
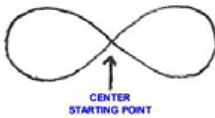
THE FINGERTIPS OF THE 3RD FINGER OF THE LEFT AND RIGHT HANDS TOUCH WITH THE PALMS FACING IN TOWARD THE FACE. THIS IS THE START POSITION AT THE CENTER OF THE FIGURE EIGHT.

## THE FIGURE EIGHT - INFINITY SWING

DRAW THE FIGURE EIGHT WITH THE EYES, HAND AND END OF THE NOSEFEATHER WHILE DOING THE LONG SWING. FOLLOW THE ARROWS - START IN THE CENTER AND DRAW UP THE CENTER AND TO THE LEFT FIRST. DRAW THE LEFT SIDE AND BACK UP THE CENTER. THEN DRAW THE RIGHT SIDE; DRAW LEFT, RIGHT, LEFT, RIGHT...

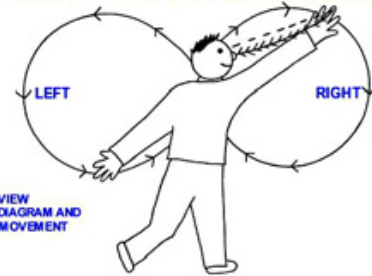
DRAW THE LEFT SIDE FIRST WITH THE LEFT HAND. SWING, TURN LEFT AND LIFT THE HEEL OF THE RIGHT FOOT. EYES LOOKING AT SHIFTING ON AND MOVING WITH THE CENTER FINGERTIP OF THE LEFT HAND AS THE HAND DRAWS THE EIGHT. THE END OF THE NOSEFEATHER AND EYES (VISUAL ATTENTION) ARE ON AND MOVING WITH THE LEFT HAND'S CENTER FINGERTIP. PALM OF HAND IS FACING IN TOWARD THE FACE WHEN IN THE CENTER, THEN MOVES OUT STRAIGHT WITH THE ARM AS THE HAND DRAWS THE LEFT SIDE.

DRAW THE RIGHT SIDE WITH THE RIGHT HAND. SWING, TURN RIGHT AND LIFT THE HEEL OF THE LEFT FOOT. EYES LOOKING AT SHIFTING ON AND MOVING WITH THE CENTER FINGERTIP OF THE RIGHT HAND AS THE HAND DRAWS THE EIGHT. THE END OF THE NOSEFEATHER AND EYES (VISUAL ATTENTION) ARE ON AND MOVING WITH THE RIGHT HAND'S CENTER FINGERTIP. PALM OF HAND IS FACING IN TOWARD THE FACE WHEN IN THE CENTER, THEN MOVES OUT STRAIGHT WITH THE ARM AS THE HAND DRAWS THE RIGHT SIDE.



BACK VIEW  
LOOK AT THE DIAGRAM AND FOLLOW THIS MOVEMENT

LOOKING, MOVING LEFT WHEN DRAWING THE LEFT SIDE ACTIVATES THE RIGHT BRAIN HEMISPHERE AND CLEAR DISTANT VISION.



LOOKING, MOVING RIGHT WHEN DRAWING THE RIGHT SIDE ACTIVATES THE LEFT BRAIN HEMISPHERE AND CLEAR CLOSE VISION.

MOVING BACK AND FORTH; LEFT, RIGHT, LEFT, RIGHT AND PASSING ACROSS THE CENTER OF THE EIGHT (MIDLINE/CENTER OF THE BRAIN AND BODY) ACTIVATES AND INTEGRATES THE LEFT AND RIGHT BRAIN HEMISPHERES, CLEAR CLOSE AND DISTANT VISION AND EQUALLY CLEAR PERFECT VISION IN THE LEFT AND RIGHT EYES.

DRAWING THE FIGURE EIGHT RELAXES AND BRINGS MOVEMENT TO THE EYES, HEADFACE, NECK, BACK AND BODY AND ACTIVATES CORRECT VISION HABITS. THIS ALSO IMPROVES THE CLARITY OF EYESIGHT.

### The Figure Eight - Infinity Swing

# THE NOSEFEATHER



THE MAN IS TRACING AROUND THE EDGE OF THE TREE WITH THE IMAGINARY NOSEFEATHER. THE END OF THE FEATHER EXTENDS OUT FROM THE ENDICENTER OF THE NOSE AND BENDS UP TO EYE LEVEL TO TOUCH THE PART OF THE OBJECT THE EYES ARE LOOKING AT IN THE CENTER OF THE VISUAL FIELD. THE FEATHER IS VERY THIN AND THE END FORMS A VERY SMALL POINT WHICH IS THE SIZE OF THE EXACT CENTER OF THE VISUAL FIELD PRODUCED BY THE FOVEA CENTRALIS IN THE MACULA, CENTER OF THE EYES RETINA. MOVE THE POINTED END OF THE NOSEFEATHER AROUND THE EDGE OF OBJECTS AND PARTS OF OBJECTS. THE EYES, END OF THE NOSEFEATHER, HEAD/FACE AND BODY MOVE TOGETHER, IN SYNCHRONIZATION; SAME TIME, SAME DIRECTION. THE NECK IS RELAXED AND MOBILE. BLINK, BREATHE ABDOMINALLY, RELAX. THE NOSEFEATHER IS ALSO USED TO SHIFT FROM POINT TO POINT (SMALL PART TO SMALL PART) ON A OBJECT. THE NOSEFEATHER IS USED TO SWITCH FROM CLOSE OBJECTS TO DISTANT OBJECTS AND DISTANT TO CLOSE MIDDLE... THE FEATHER BECOMES LONGER WHEN LOOKING TO THE DISTANCE AND SHORTER WHEN LOOKING AT CLOSE OBJECTS. THE NOSEFEATHER ACTIVATES EASY USE OF CORRECT VISION HABITS; SHIFTING ( EYE MOVEMENT), CENTRAL FIXATION, MOVEMENT OF THE HEAD/FACE, BODY WITH THE EYES, RELAXATION AND MOVEMENT OF THE NECK. THE FEATHER CAN BE IMAGINED AS BEING INVISIBLE. THIS ALLOWS THE BRAIN TO IMAGINE, REMEMBER THE OBJECT THE EYES ARE LOOKING AT CLEAR WITHOUT BEING DISTRACTED BY THE IMAGE OF THE FEATHER.

TRACE OBJECTS AND PARTS OF OBJECTS WITH THE NOSEFEATHER  
TRACE ALONG THE DASHED LINES ON THE DIAGRAM AND THEN ON ANY PARTS.  
SHIFT FROM PART TO PART ON OBJECTS WITH THE NOSEFEATHER.

TRACE ON THE LETTER E

TRACE, SHIFT ON BIRDS, AIRPLANES, BOATS ON THE WATER

TRACE ON ALONG THE OUTSIDE AND INSIDE EDGE OF THE E

TRACE ON AROUND THE EDGES OF THE MOON COUNTER CLOCKWISE AND CLOCKWISE

TRACE AROUND THE EDGE OF THE TREE WITH THE NOSEFEATHER

SHIFT FROM PART TO PART WITH THE NOSEFEATHER. LEFT AND RIGHT, TOP AND BOTTOM, DIAGONALLY, MIDDLE AND TO ANY PART IN ANY ORDER, DIRECTION. TRACE AND SHIFT ON SMALL PARTS; LEAVES, BRANCHES, BARK.

TRACE SMALL OBJECTS AND SMALL PARTS OF OBJECTS: FLOWER - CLOSE DISTANCE. THE MOON - FAR DISTANCE.

TRACE LEFT AND RIGHT

DIAGONALLY

TRACE UP AND DOWN

FLOWER

STONE

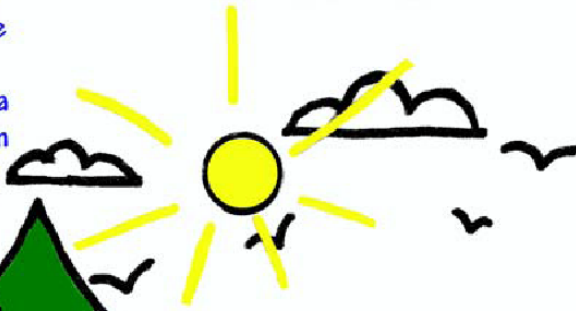
GRASS

TRACE ON ALONG THE EDGE OF THE HOUSE WITH THE NOSEFEATHER. TRACE/MOVE THE END OF THE FEATHER ALONG THE DASHED LINES AND ON ANY AREAS. TRACE THE SIDES, ROOF, DOOR, WINDOWS, WINDOW PANES, CHIMNEY, BRICKS IN THE CHIMNEY. SHIFT ON PARTS. COMBINE TRACING AND SHIFTING.

TRACE AND SHIFT WITH THE NOSEFEATHER ON SMALL OBJECTS AND SMALL PARTS, FINE DETAILS OF OBJECTS.

TRACE AND SHIFT ON LARGE, MEDIUM, SMALL OBJECTS AND PARTS OF OBJECTS AT CLOSE, MIDDLE, FAR DISTANCES. BLINK, BREATHE ABDOMINALLY, RELAX

The rope can be imagined as a thin string for a lighter feeling in the mind, eyes.

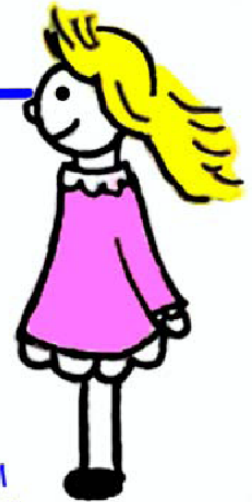


Shift on Baby Yellow Kitty. Then switch to the distant tree, glide along the rope to the tree. Shift on the tree. Switch, glide on the rope back to the Kitty, shift on the Kitty, then back to the tree. Repeat.



Imaginary Rope. Glide the eyes, (visual attention, central field) back and forth along the rope to close and far objects. Shift on a object, then glide to another object, shift on it, glide back to the first object...

For switching on objects in a straight line with eachother.



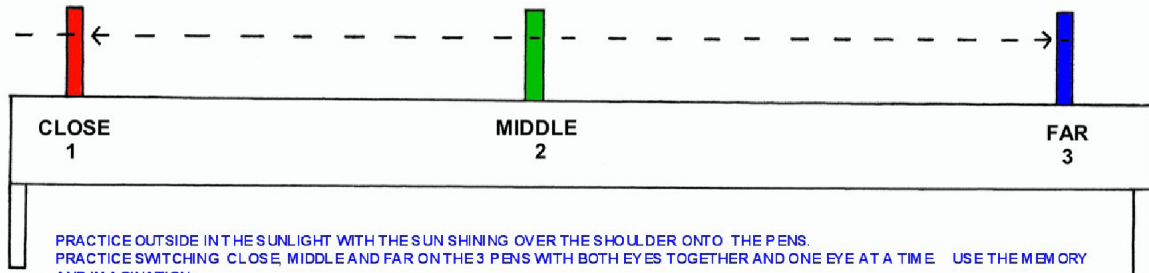
Let the rope be loose, avoid tension. A relaxed feeling should occur as the eyes, visual attention move along the rope. Move, glide easy, relaxed on the rope. The rope makes it relaxing, easy for the eyes to converge, accommodate for close objects and diverge, un-accommodate for distant objects. This is especially relaxing for eyes that have tight muscles, crossed, wandering eyes. Stiff, rigid eye and neck muscles can cause a feeling of tension, pulling, a little dizziness as switching close and far is practiced and the eyes try to function, move normally, together and quickly. The rope helps to prevent this feeling of tension. It activates relaxation and quick, easy improvement of eye movement, visual clarity.

Blink, relax,, breathe, switch, shift, central fixation. Use the Nosefeather on the rope.



## SWITCH BACK AND FORTH; CLOSE, MIDDLE, FAR ON THREE PENS FOR CLEAR VISION AT ALL DISTANCES

DIRECTIONS; PLACE THREE COLORED PENS (OR POPSICLE STICKS) UP RIGHT INTO A CARDBOARD BOX, IN A STRAIGHT LINE AT CLOSE, MIDDLE AND FAR DISTANCES. THE 3 PENS ARE IN THE CENTER OF THE VISUAL FIELD, BETWEEN THE EYES, AT EYE LEVEL. RED, GREEN AND BLUE ARE THE MAIN COLORS OF THE SUNS LIGHT SPECTRUM. COMBINATIONS OF RED, GREEN, BLUE CREATES OTHER COLORS. THE CONES IN THE EYES RETINA DETECT RED, GREEN, BLUE AND ALL OTHER COLORS. RED ACTIVATES THE LEFT BRAIN HEMISPHERE AND CLEAR CLOSE VISION. BLUE ACTIVATES THE RIGHT BRAIN HEMISPHERE AND CLEAR DISTANT (FAR) VISION. GREEN ACTIVATES AND INTEGRATES BOTH LEFT AND RIGHT BRAIN HEMISPHERES AND CLEAR CLOSE AND DISTANT VISION. ALL 3 COLORS ACTIVATE CLEAR MIDDLE DISTANCE VISION. ACTIVATING AND INTEGRATING THE LEFT AND RIGHT BRAIN HEMISPHERES PRODUCES EQUALLY CLEAR PERFECT VISION IN THE LEFT AND RIGHT EYES AT ALL DISTANCES CLOSE, MIDDLE, FAR. SWITCHING ON ANY OBJECTS; CLOSE, FAR, CLOSE, FAR, AND TO THE MIDDLE DISTANCE ACTIVATES AND INTEGRATES THE LEFT AND RIGHT BRAIN HEMISPHERES AND CLEAR VISION AT ALL DISTANCES. SWITCHING ON THE RED, BLUE AND GREEN PENS INCREASES ACTIVATION AND INTEGRATION THE LEFT AND RIGHT BRAIN HEMISPHERES AND CLARITY OF VISION.



PRACTICE OUTSIDE IN THE SUNLIGHT WITH THE SUN SHINING OVER THE SHOULDER ONTO THE PENS.

PRACTICE SWITCHING CLOSE, MIDDLE AND FAR ON THE 3 PENS WITH BOTH EYES TOGETHER AND ONE EYE AT A TIME USE THE MEMORY AND IMAGINATION;

1 - EYES OPEN - BOTH EYES TOGETHER - SWITCH CLOSE, FAR, MIDDLE ON THE 3 PENS AND SHIFT ON EACH PEN (SHIFT ON ONE PEN AT A TIME) AND REMEMBER, IMAGINE AND SEE EACH PEN CLEAR WITH BRIGHT PERFECT COLOR.

2 - EYES CLOSED - REPEAT IN THE IMAGINATION MIND - IMAGINE SWITCHING CLOSE, FAR, MIDDLE ON THE 3 PENS AND IMAGINE SHIFTING ON THE PENS (ONE PEN AT A TIME) AND REMEMBER, IMAGINE AND SEE IN THE MIND EACH PEN CLEAR AND WITH PERFECT BRIGHT COLOR.

3 - EYES OPEN - REPEAT NUMBER 1.

4 - ONE EYE AT A TIME - REPEAT NUMBER 1, 2, 3 WITH ONE EYE AT A TIME; LEFT EYE (RIGHT EYE COVERED WITH PATCH AND OPEN UNDER THE PATCH) - SWITCH, SHIFT ON THE 3 PENS AND REMEMBER, IMAGINE AND SEE THE PENS CLEAR AND WITH PERFECT BRIGHT COLOR WITH THE EYE OPEN, CLOSED, OPEN.

REPEAT WITH THE RIGHT EYE (LEFT EYE COVERED WITH PATCH AND OPEN UNDER THE PATCH).

REPEAT WITH LEFT EYE AGAIN, THEN RIGHT, LEFT, RIGHT.

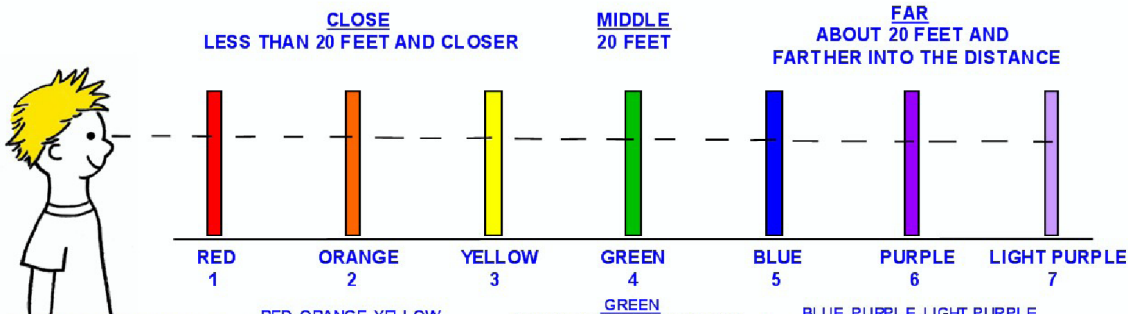
IF VISION IS LESS CLEAR IN ONE EYE - PRACTICE WITH THAT EYE A LITTLE LONGER.

WHEN USING ONE EYE; KEEP THE PEN BETWEEN THE EYES, AT EYE LEVEL, CENTER OF THE VISUAL FIELD.

5 - END BY PRACTICING WITH BOTH EYES TOGETHER AGAIN - STEPS 1,2,3.

PRACTICE WITH THE PENS PLACED AT A VARIETY OF DISTANCES FOR CLEAR VISION AT ALL DISTANCES.

## SWITCH ON THE SEVEN COLORED PENS PLACED AT CLOSE, MIDDLE AND FAR DISTANCES



RED PEN - 6 TO 12 INCHES FROM THE EYES OR START AT AN Y DISTANCE THAT IS COMFORTABLE. PLACE THE 7 PENS IN THE CENTER OF THE VISUAL FIELD, BETWEEN THE EYES, AT EYE LEVEL. PENS ARE IN A STRAIGHT LINE.

### DIRECTIONS

+SWITCHING BACK AND FORTH; CLOSE TO FAR, FAR TO CLOSE AND TO/ FROM THE MIDDLE DISTANCE TO/FROM CLOSE AND FAR ACTIVATES AND INTEGRATES THE LEFT AND RIGHT BRAIN HEMISPHERES AND CLEAR CLOSE, MIDDLE, DISTANT/FAR VISION.

COLOR IMPROVES BRAIN FUNCTION AND CLARITY OF VISION.

+ SWITCHING ON THE COLORED PENS; RED, ORANGE, YELLOW (CLOSE DISTANCES) TO BLUE, PURPLE, LIGHT PURPLE (FAR DISTANCES) AND TO GREEN (MIDDLE DISTANCE) INCREASES ACTIVATION AND INTEGRATION OF THE LEFT AND RIGHT BRAIN HEMISPHERES AND CLARITY OF VISION.

EXAMPLE; RED, CLOSE (LEFT BRAIN HEMISPHERE) TO BLUE, FAR (RIGHT BRAIN HEMISPHERE)

BLUE, FAR (RIGHT HEMISPHERE) TO RED, CLOSE (LEFT HEMISPHERE) ACTIVATES AND INTEGRATES THE LEFT AND RIGHT HEMISPHERES AND CLEAR CLOSE AND FAR VISION.

MIDDLE DISTANCE VISION IS AUTOMATICALLY IMPROVED. SWITCHING TO AND FROM THE MIDDLE DISTANCE GREEN TO/FROM THE CLOSE AND FAR DISTANCES WILL INCREASE ACTIVATION AND INTEGRATION OF THE BRAIN HEMISPHERES, CLARITY OF CLOSE, MIDDLE AND FAR VISION.

SWITCH CLOSE, MIDDLE, FAR IN ANY ORDER ON THE 7 PENS;

RED TO BLUE - BLUE TO RED. RED TO LIGHT PURPLE - LIGHT PURPLE TO RED. RED TO GREEN - GREEN TO RED

RED TO BLUE, TO GREEN, TO BLUE, TO YELLOW ORANGE TO GREEN - GREEN TO ORANGE. PURPLE TO BLUE, PURPLE, RED..

SHIFT ON EACH PEN THE EYES LOOK AT. LOOK AT A PEN AND SHIFT ON IT TO PREVENT STARING. AVOID STARING, EYE IMMOBILITY, SQUINTING, TRYING TO SEE CLEAR.

SHIFT ON THE PEN FROM PART TO PART; TOP AND BOTTOM, LEFT AND RIGHT, DIAGONALLY, TO MIDDLE AND TO AN Y DIRECTION, PART.

MOVE THE HEAD/FACE WITH THE EYES, SAME TIME, SAME DIRECTION.

THE EYES, HEAD, FACE, NECK AND BODY ARE RELAXED AND MOBILE.

BLINK, BREATHE, RELAX. PRACTICE OUTSIDE IN THE SUNLIGHT. PRACTICE WITH BOTH EYES AND ONE EYE AT A TIME. USE THE MEMORY AND IMAGINATION. SEE COMPLETE DIRECTIONS ON TOP PICTURE. TRACE AROUND THE EDGES OF THE PENS WITH THE NOSEFEATHER.

SWITCHING, SHIFTING ON THE PENS AND USE OF CENTRAL FIXATION KEEPS THE EYES RELAXED, IMPROVES CONVERGENCE, ACCOMMODATION AT CLOSE DISTANCES, UNCONVERGENCE, UNACCOMMODATION AT FAR DISTANCES.

CENTRAL FIXATION; PLACE THE PART OF THE PEN THE EYES ARE LOOKING AT IN THE CENTER OF THE VISUAL FIELD, BETWEEN THE EYES AT EYE LEVEL.

THE CLEAR CENTER OF THE VISUAL FIELD MOVES WITH THE EYES AS THE EYES SHIFT FROM PART TO PART ON THE PENS.

RED, ORANGE, YELLOW  
ACTIVATES THE LEFT BRAIN HEMISPHERE AND CLEAR CLOSE VISION

GREEN  
ACTIVATES AND INTEGRATES THE LEFT AND RIGHT BRAIN HEMISPHERES AND CLEAR CLOSE, MIDDLE AND FAR VISION. GREEN, THE MIDDLE DISTANCE, IS THE BALANCING COLOR AND REPRESENTS THE CENTER/MIDDLE OF THE BRAIN WHERE THE LEFT AND RIGHT HEMISPHERES MEET, COMMUNICATE, SWITCH BACK AND FORTH.

BLUE, PURPLE, LIGHT PURPLE  
ACTIVATES THE RIGHT BRAIN HEMISPHERE AND CLEAR DISTANT (FAR) VISION

SPACE THE PENS FARTHER APART OR CLOSER TOGETHER TO PRACTICE SWITCHING AT A VARIETY OF DISTANCES CLOSE AND FAR.

AT VERY CLOSE DISTANCES THE PENS SIZE MAY BLOCK THE VIEW OF OTHER PENS. COLORED TOOTHPICKS CAN BE USED IN PLACE OF THE PENS WHEN SWITCHING AT VERY CLOSE DISTANCES; ALL TOOTHPICKS WITHIN 8 INCHES FROM EYES...

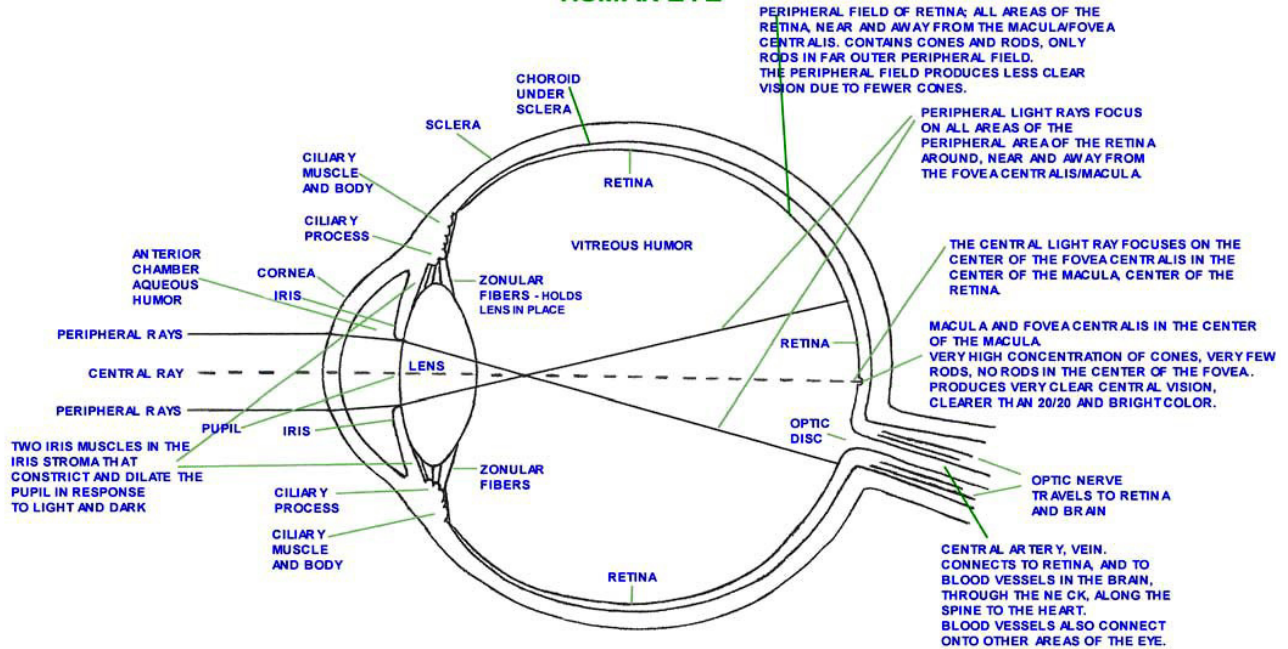
SEE DIAGRAM BELOW. BE CAREFUL WHEN LOOKING AT THE TOOTHPICKS CLOSE TO THE EYES; KEEP ENDS AWAY FROM EYES.



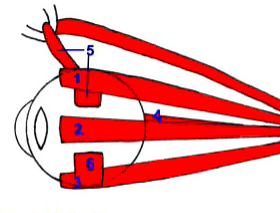
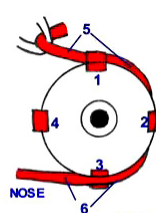
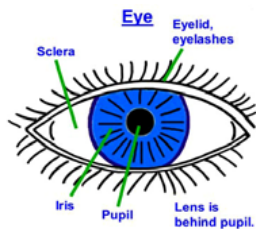
COLORED TOOTHPICKS

**CENTRAL FIXATION - SEE CLEAR WITH THE CENTER OF THE VISUAL FIELD**

**HUMAN EYE**



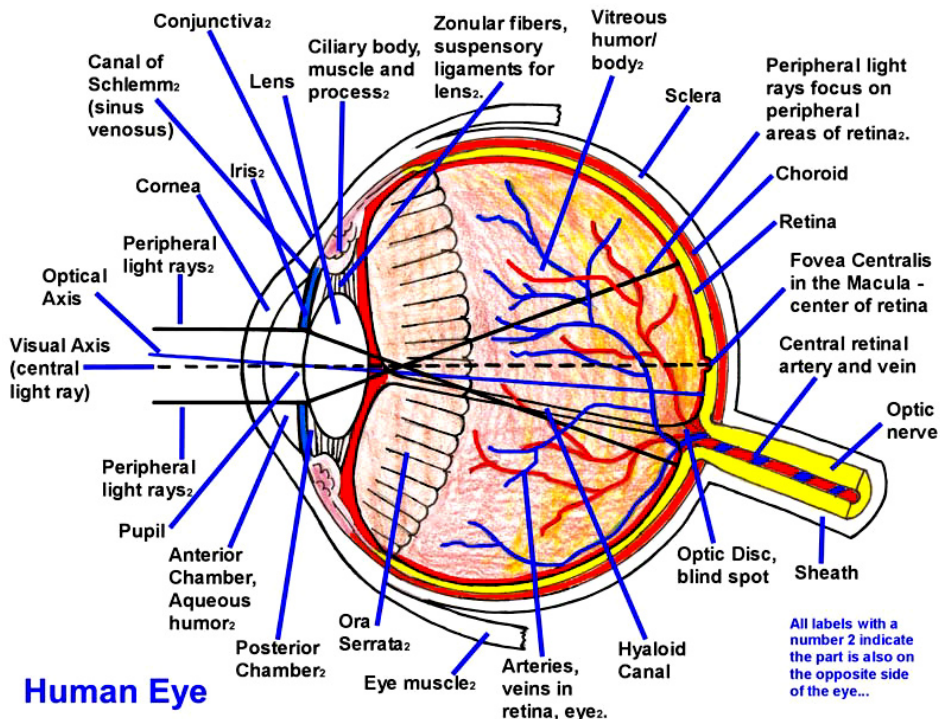
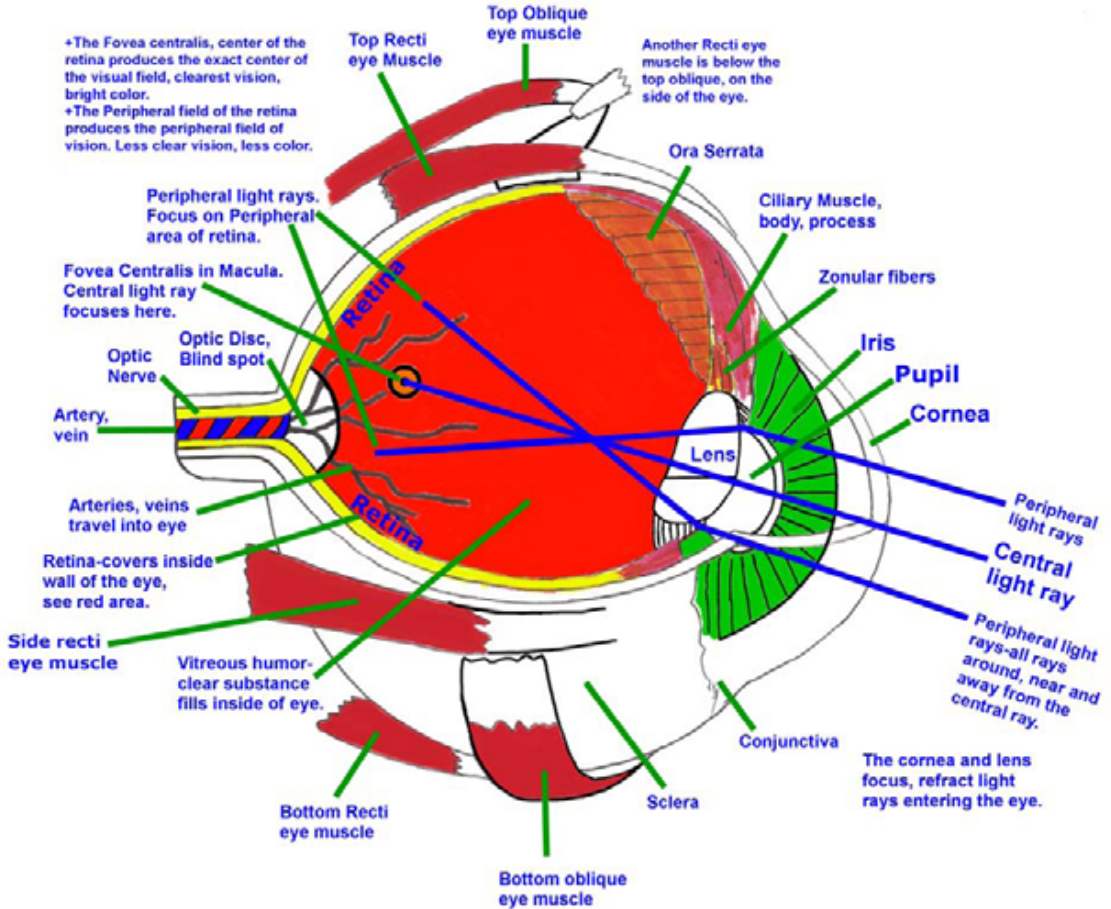
THE RETINA CONTAINS CONES AND RODS - LIGHT, ENERGY RECEPTORS. CONES PRODUCE VERY CLEAR VISION - CLEARER THAN 20/20 AND BRIGHT COLOR. RODS PRODUCE LESS CLEAR VISION (20/400) - RODS PERCEIVE GREY/BLACK/WHITE, LIGHT AND DARK BUT NO OTHER COLORS. RODS DETECT MOVEMENT OF OBJECTS IN THE VISUAL FIELD AND CONTINUE TO FUNCTION IN ALMOST COMPLETE DARKNESS. THE FOVEA AND MACULA IN THE CENTER OF THE RETINA CONTAIN MANY CONES, (ONLY CONES IN THE CENTER OF THE FOVEA) AND PRODUCE VERY CLEAR VISION IN THE CENTER OF THE VISUAL FIELD. THE PERIPHERAL FIELD OF THE RETINA AROUND, NEAR AND AWAY FROM THE FOVEA/MACULA CONTAINS LESS CONES AND MORE RODS, AND ONLY RODS (NO CONES) IN THE FAR OUTER PERIPHERAL FIELD. THIS RESULTS IN LESS CLEAR PERIPHERAL VISION, THE FAR OUTER PERIPHERAL FIELD BEING MOST UNCLEAR. SEE CLEAR WITH CENTRAL FIXATION - A CORRECT VISION HABIT - PLACE THE OBJECT OF VISUAL ATTENTION IN THE CENTER OF THE VISUAL FIELD. WHEN THE EYES USE THE CENTER OF THE VISUAL FIELD, THE CENTRAL RAY FOCUS PERFECTLY ON THE CENTER OF THE FOVEA CENTRALIS. RAYS CLOSEST TO THE CENTRAL RAY FOCUS ON THE MACULA, AND PERIPHERAL RAYS FOCUS PERFECTLY ON THE PERIPHERAL FIELD OF THE RETINA RESULTING IN PERFECT CLEAR CENTRAL VISION, CLEARER THAN 20/20 AND MAXIMUM CLARITY AND FUNCTION OF THE PERIPHERAL FIELD. THE CLARITY OF THE ENTIRE VISUAL FIELD IMPROVES.



**OUTER EYE MUSCLES**  
RECTI - # 1, 2, 3, 4  
OBLIQUE - 5, 6

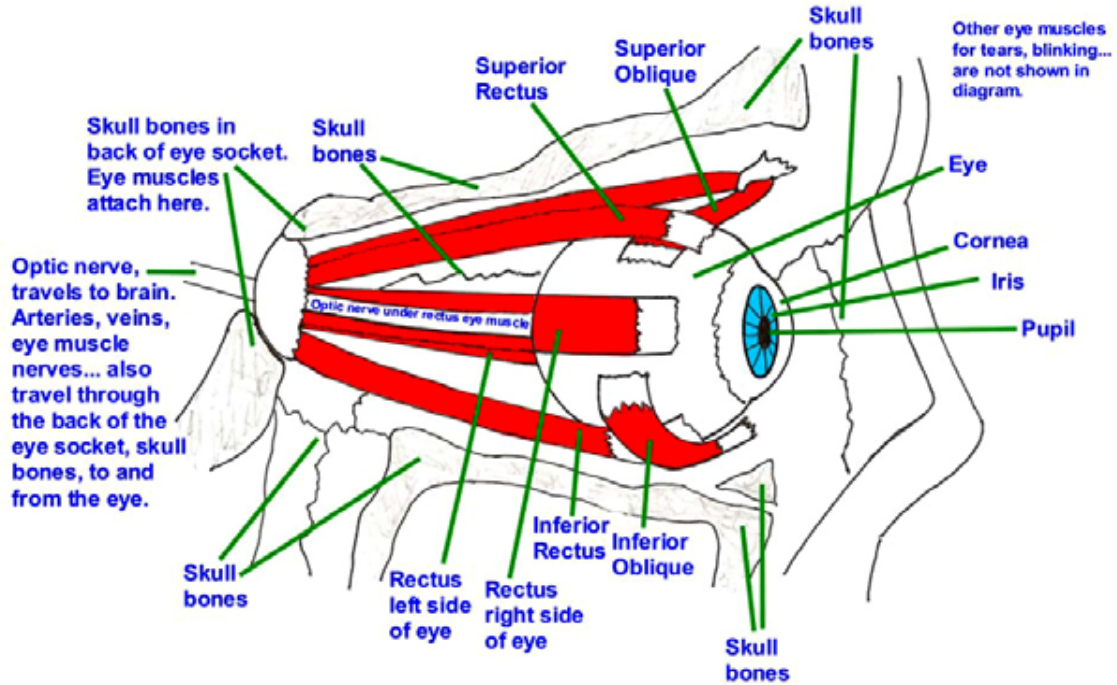
Video - <http://www.youtube.com/watch?v=nIrKuQEJ6y4>

The retina contains cones and rods, light receptors. Cones=very clear vision, bright color. Activated in light. Stops functioning in almost complete darkness. Rods=Less clear vision, grey, white color. Also senses movement in the visual field and continues to function in very dim light, almost complete darkness. The macula contains many cones, and a few rods. The fovea contains a high concentration of cones and no rods. The peripheral field of the retina contains many rods and some cones with less and no cones into the far outer peripheral. This is why the center of the visual field is clearest. See clear by using the Macula, Fovea Centralis, center of the visual field. See much clearer, fine details, brightest color by using the fovea, exact center of the retina, visual field. The center of the visual field moves with the eyes from object to object, part to part on objects keeping the vision clear.

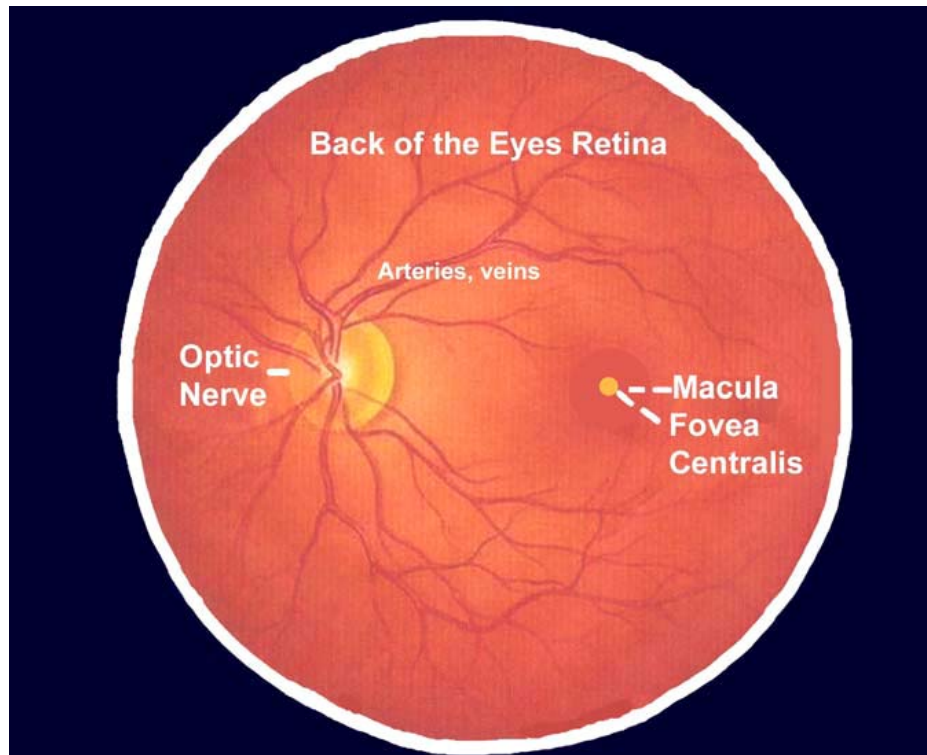


**Human Eye**

## Eye socket, bones, eye, eye muscles, optic nerve.



Notice that the eye socket is composed of bone segments, aligned, grown together. These are part of the skull bones. Eye muscles attach to the skull bones in the back of the eye socket. Misalignment of the eye socket or skull bones due to accidents, birth trauma, forcep, suction delivery... can mis-align the bones, place pressure, tension on/in the eye, optic nerve, eye muscles resulting in crossed, wandering eyes, imperfect convergence, divergence, accommodation, un-accommodation, unclear vision, astigmatism and other abnormal eye conditions. Special chiropractors (Cranial, Cranio Sacral Therapy, Osteopathy) can re-align the bones of the skull if needed. Often, use of the Bates method alone can correct eye function and clarity of the vision.



## SUGGESTIONS

1. If the vision of the patient is improved under the care of the doctor, and the patient neglects to practice, when he leaves the office, what he is told to do at home, the treatment has been of no benefit whatever. The improved vision was only temporary. Faithful practice permanently improves the sight to normal.
2. If the patient conscientiously practices the methods, as advised by the doctor, his vision always improves. This applies to patients with errors of refraction, as well as organic diseases.
3. For cases of squint we find that the long swing is beneficial to adults and to children.
4. When a patient suffers with cataract, palming is usually the best method of treatment, and should be practiced many times every day.
5. All patients with imperfect sight unconsciously stare, and should be reminded by those who are near to them to blink often. To stare is to strain. Strain is the cause of imperfect sight.

The following rules will be found helpful if faithfully observed:—

6. While sitting, do not look up without raising your chin. Always turn your head in the direction in which you look. Blink often.
7. Do not make an effort to see things more clearly. If you let your eyes alone, things will clear up by themselves.

8. Do not look at anything longer than a fraction of a second without shifting.
9. While reading, do not think about your eyes, but let your mind and imagination rule.
10. When you are conscious of your eyes while looking at objects at any time, it causes discomfort and lessens your vision.
11. It is very important that you learn how to imagine stationary objects to be moving, without moving your head or your body.
12. Palming is a help, and I suggest that you palm for a few minutes many times during the day, at least ten times. At night just before retiring, it is well to palm for half an hour or longer.

## TEST CARD PRACTICE

1. Every home should have a test card.
2. It is best to place the card permanently on the wall in a good light.
3. Each member of the family or household should read the card every day.
4. It takes only a minute to test the sight with the card. If you spend five minutes in the morning practicing, it will be a great help during the day.
5. Place yourself ten feet from the card and read as far as you can without effort or strain. Over each line of letters are small figures indicating the distance at which the normal eye can read them. Over the big C at the top of the card is the figure 200. The big C, therefore, should be read by the normal eye at a distance of two hundred feet. If you can read this line at ten feet, your vision would be  $10/200$ . The numerator of the fraction is always the distance of the card from the eyes. The denominator always denotes the number of the line read. If you can only read the line marked 40 at ten feet, the vision is  $10/40$ .
6. If you can only see to the fifth line, for example, notice that the last letter on that line is an R. Now close your eyes, cover them with the palms of the hands and remember the R. If you will remember that the left side is straight, the right side partly curved, and the bottom open, you will get a good mental picture of the R with your eyes closed.

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This mental picture will help you to see the letter directly underneath the R, which is a T.

7. Shifting is good to stop the stare. If you stare at the letter T, you will notice that all the letters on that line begin to blur. It is beneficial to close your eyes quickly after you see the T, open them, and shift to the first figure on that line, which is a 3. Then close your eyes and remember the 3. You will become able to read all the letters on that line by closing your eyes for each letter.
8. Keep a record of each test in order to note your progress from day to day.
9. When you become able to read the bottom line with each eye at ten feet, your vision is normal for the distance, 10/10.
10. The distance of the Snellen test card from the patient is a matter of considerable importance. However, some patients improve more rapidly when the card is placed fifteen or twenty feet away, while others fail to get any benefit with the card at this distance. In some cases the best results are obtained when the card is as close as one foot. Others with poor vision may not improve when the card is placed at ten feet or further, or at one foot or less, but do much better when the card is placed at a middle distance, at about eight feet. Some patients may not improve their vision at all at ten feet, but are able to improve their sight at twenty feet, or at one foot. While some patients are benefited by practicing with the card daily, always at the same distance, there are others who seem to be benefited when the distance of the card from the patient is changed daily.



## SUN TREATMENT

Most ophthalmologists prescribe dark glasses to nearly all of their patients who suffer from the brightness of light. This practice, in my opinion, has been overdone. I remember one patient who was in the hospital for two years in a dark room, with both eyes bandaged with a dark binding day and night continuously. When she left the hospital she was in a very pitiable condition. She was practically blind in the bright sunlight. She went to a great many clinics and eye doctors and all they did for her was to give her stronger dark glasses. In time these dark glasses did not give her any relief. Instead of being helpful to her weak eyes, the glasses had the effect of making them more sensitive to the light than they had ever been before. It has been my experience that all persons who wear dark glasses sooner or later develop very serious inflammation of their eyes. The human eye needs the light in order to maintain its efficiency. The use of eye-shades and protections of all kinds from the light is very injurious to the eyes.

Sunlight is as necessary to normal eye as is rest and relaxation. If it is possible, start the day by exposing the eyes to the sun—just a few minutes at a time will help. Get accustomed to the strong light of the sun by letting it shine on your closed eyelids. Later, when you can look down sufficiently, by gently lifting the upper lid the white part of the eye can be exposed, while the sun's rays strike directly on it. It is good to move the head slightly from side to side while doing this, in order to prevent straining. One cannot get too much sun treatment.



Ophthalmologist  
William H. Bates

## BETTER EYESIGHT

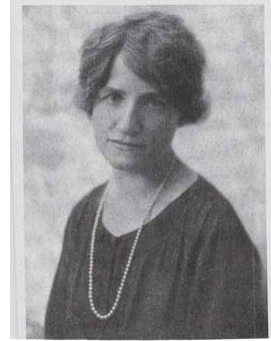
A MONTHLY MAGAZINE DEVOTED TO THE PREVENTION AND  
CURE OF IMPERFECT SIGHT WITHOUT GLASSES

July, 1919 - June, 1930 - 132 Magazine Issues

Central Fixation Publishing Co.

New York, N.Y. USA

July, 1919



Emily C. Lierman, Bates

**Do you read imperfectly?** Can you observe then that when you look at the first word, or the first letter, of a sentence you do not see best where you are looking; that you see other words, or other letters, just as well as or better than the ones you are looking at? Do you observe

also that the harder you try to see the worse you see? Now close your eyes and rest them, remembering some color, like black or white, that you can remember perfectly. Keep them closed until they feel rested, or until the feeling of strain has been completely relieved. Now open them and look at the first word or letter of a sentence for a fraction of a second. If you have been able to relax, partially or completely, you will have a flash of improved or clear vision, and the area seen best will be smaller.

After opening the eyes for this fraction of a second, close them again quickly, still remembering the color, and keep them closed until they again feel rested. Then again open them for a fraction of a second. Continue this alternate resting of the eyes and flashing of the letters for a time, and you may soon find that you can keep your eyes open longer than a fraction of a second without losing the improved vision.

If your trouble is with distant instead of near vision, use the same method with distant letters. In this way you can demonstrate for yourself the fundamental principles of the cure of imperfect sight by treatment without glasses. If you fail, ask someone with perfect sight to help you.

**Do You Read Imperfectly? - This first article and others are placed on page 2 on the inside cover of each monthly Better Eyesight Magazine issue. The articles consist of a variety of the Best of Dr. Bates Original Natural Vision Improvement Treatments, Activities. The student can copy, paste these into a small fine print booklet to carry in a pocket and practice in your spare time.**

### FOREWORD

WHEN the United States entered the European war recruits for general military service were required to have a visual acuity of 20/40 in one eye and 20/100 in the other.<sup>1</sup> This very low standard, although it is a matter of common knowledge that it was interpreted with great liberality, proved to be the greatest physical obstacle to the raising of an army. Under it 21.68 per cent of the registrants were rejected, 13 per cent more than for any other single cause.<sup>2</sup>

Later the standard was lowered<sup>3</sup> so that men might be "unconditionally accepted for general military service" with a vision of 20/100 in each eye without glasses, provided one eye was correctible to 20/40. For special or limited service they might be accepted with only 20/200 in each eye without glasses, provided one was correctible to 20/40. At the same time a great many defects other than errors of refraction were admitted in both classes, such as squint not interfering with vision, slight nystagmus, and color blindness. Even total blindness in one eye was not a cause for rejection to the limited service class, provided it was not due to progressive or organic change, and the vision of the other eye was normal. Under this incredible standard eye defects still remained one of three leading causes of rejection.

Over ten per cent, (10.65) of the registrants were disqualified by them, while defects of the bones and joints and of the heart and blood-vessels ran respectively one and one and a half percent higher.<sup>4</sup>

Most of the revelations about the physical condition of the American people which resulted from the operation of the draft law had been anticipated by persons who had been giving their attention to such matters - and whose warnings had long fallen upon deaf ears - but it is doubtful if anyone had formed an adequate conception of the truth regarding the condition of the nation's eyesight. That it should be impossible to raise an army with even half normal vision in one eye, and that one man in every ten rejected for military service should have been unable, even by the aid of glasses, to attain this standard, is a situation so appalling that words fail to characterize it, so incredible that only the most unimpeachable evidence could compel belief in it. Under these circumstances it seems to me the plain duty of anyone who has found any means of controlling the evil in question to give the facts the widest possible publicity.

Most writers on ophthalmology today appear to believe that defective eyesight is part of the price we must pay for civilization. The human eye, they say, was not designed for the uses to which it is now put. Eons before there were any schools, or printing presses, electric lights, or moving pictures, its evolution was complete. In those days it served the needs of the human animal perfectly, but it is not to be expected, we are told, that it should respond without injury to the new demands. By care it is thought that this injury may be minimized, but to eliminate it wholly is considered to be too much to hope for. Such is the depressing conclusion to which the monumental labors of a hundred years and more have led us.

I have no hesitation in stating that this conclusion is unqualifiedly wrong. Nature did not blunder when she made the human eye, but has given us in this intricate and wonderful mechanism, upon which so much of the usefulness as well as the pleasure of life depends, an organ as fully equal to the needs of civilization as to those of the Stone Age. After thirty-three years of clinical and experimental work, I have demonstrated to my own satisfaction and that of others that the eye is capable of meeting the utmost demands of civilization; that the errors of refraction which have so long dogged the footsteps of progress, and which have made

the raising of an army during the recent war so difficult, are both preventable and curable; and that many other forms of imperfect sight, long held to be incurable, may be either improved or completely relieved.

All these discoveries have been published in the medical press, but while their reliability has never been publicly disputed, the medical profession has so far failed to make use of them. Meantime the sight of our children is being destroyed daily in the schools, and our young men and women are entering life with a defect which, if uncorrected, must be a source of continual misery and expense to them, sometimes ending in blindness or economic ruin. Admitting for the sake of argument that I may be wrong in my conclusion that these things are unnecessary, it is time I was proven to be wrong. I should not be allowed to play on the forlorn hope of a suffering world. If I am right, as I know I am, a suffering world should no longer be deprived of the benefit of my discoveries.

To give publicity to these discoveries and arouse discussion regarding them is one of the objects for which this magazine has been started. At the same time its pages are open to everyone who has any light to throw upon the problem. It has too long been the custom of ophthalmologists to disregard every fact at variance with the accepted theories. Such facts, when observed, have usually not been published, and when published they have either been ignored or explained away in some more or less plausible manner.

The management of this magazine wishes to make it a medium for the publication of such facts, which, it may safely be asserted, are known to every ophthalmologist of any experience, and which, if they had received proper consideration, would long ago have led us out of the blind alley in which we are now languishing.

While I think it may be truthfully said that many of my methods are new and original, other physicians, both in this country and in Europe, have cured themselves and others by treatment without glasses. Lay persons have done the same.

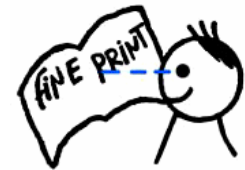
### Fine Print – For Clear Close Vision

In *The Autocrat of the Breakfast Table*, Oliver Wendell Holmes published a very remarkable case of the cure of presbyopia.

"There is now living in New York State," he says, "an old gentleman who, perceiving his sight to fail, immediately took to exercising it on the finest print, and in this way fairly bullied Nature out of her foolish habit of taking liberties at five-and-forty, or thereabouts. And now this old gentleman performs the most extraordinary feats with his pen, showing that his eyes must be a pair of microscopes. I should be afraid to say how much he writes in the compass of a half-dime, whether the Psalms or the Gospels, or the Psalms and the Gospels, I won't be positive."<sup>5</sup>

An officer in the American Expeditionary Forces, whose letter is published elsewhere, wrote to me about a year ago that he has cured himself of presbyopia, and after half a lifetime of misery was entirely free from eye discomfort. There must be many more of these cases, and we want to hear of them.

(Five and forty=fifties, forties... year of age.) Reading fine print maintains clear close and distant vision at all ages and keeps the eyes healthy, prevents development of eye diseases, cataracts. Along with good nutrition, avoiding eyeglasses.



### FUNDAMENTAL FACTS

For about seventy years it has been believed that the eye accommodates for vision at different distances by changing the curvature of the lens, and this theory has given birth to another, namely, that errors of refraction are due to a permanent organic change in the shape of the eyeball. On these two ideas the whole system of treating errors of refraction is based at the present time.

My experiments and clinical observations have demonstrated that both these theories are wrong.<sup>6</sup> They have shown:

- (1) That the lens is not a factor in accommodation;**
- (2) That the change of focus necessary for vision at different distances is brought about by the action of the superior and inferior obliques, which, by their contraction and relaxation, change the length of the eyeball as the length of the camera is changed by the shortening and lengthening of the bellows;**
- (3) That errors of refraction are due to the abnormal action of these muscles and of the recti, the obliques being responsible for myopia and the recti for hypermetropia, while both may combine in the production of astigmatism;**
- (4) That this abnormal action of the muscles on the outside of the eyeball is always due to mental strain of some kind.**

This being the case it follows that all errors of refraction can be cured by relaxation. All methods of treatment, therefore, are simply different ways of obtaining relaxation. And because it is impossible to relax the eye muscles without relaxing the mind-and the relaxation of the mind means the relaxation of the whole body - it also follows that improvement in the eyesight is always accompanied by an improvement in health and mental efficiency.

The fact that all errors of refraction are functional can often be demonstrated within five minutes. When a person with myopia, hypermetropia, or astigmatism, looks at a blank wall without trying to see, the retinoscope, with a plane mirror, at six feet, indicates, in flashes or more continuously no error of refraction. The conditions should be favorable for relaxation and the doctor should be as much at his ease as the patient.

It can also be demonstrated with the retinoscope that persons with normal sight do not have it all the time.<sup>7</sup> When the vision of such persons becomes imperfect at the distance it will be found that myopic refraction has been produced;<sup>8</sup> when it becomes imperfect at the near point it will be found that hypermetropia has been produced.

## CENTRAL-FIXATION

An invariable symptom of all abnormal conditions of the eyes, whether functional or organic, is the loss of central-fixation. When a person with perfect vision looks at a letter on the Snellen test card he can always observe that all the other letters in his field of vision are seen less distinctly. He can also observe that when he looks at the bottom of even the smallest letter on the card, the top appears less black and less distinct than the part directly regarded, while the same is true of a letter of diamond type, or of the smallest letters that are printed. When a person with imperfect sight looks at the card he can usually observe that when he can read a line of letters he is able to look at one letter of a line and see it better than the others, but the letters of a line he cannot read may look all alike, or those not directly regarded may even be seen better than the one fixed.

These conditions are due to the fact that when the sight is normal the sensitiveness of the fovea is normal, but when the sight is imperfect, from whatever cause, the sensitiveness of the fovea is lowered, so that the eye sees equally well, or even better, with other parts of the retina. Contrary to what is generally believed, the part seen best when the sight is normal is extremely small. **The text-books say that at twenty feet an area having a diameter of a quarter of an inch can be seen with maximum vision, but anyone who tries at this distance to see every part of one of the small letters of the Snellen test card - the diameter of which is about a quarter of an inch - equally well at one time will immediately become myopic. The fact is that the nearer the point of maximum vision approaches a mathematical point, which has no area, the better the sight.**

The cause of this loss of function in the center of sight is mental strain; and as all abnormal conditions of the eyes, organic as well as functional, are accompanied by mental strain, all such conditions must necessarily be accompanied by loss of central-fixation.

When the mind is under a strain the eye usually goes more or less blind. The center of sight goes blind first, partially or completely, according to the degree of the strain, and if the strain is great enough the whole or the greater part of the retina may be involved. When the vision of the center of sight has been suppressed, partially or completely, the patient can no longer see the point which he is looking at best, but sees objects not regarded directly as well, or better, because the sensitiveness of the retina has now become approximately equal in every part, or is even better in the outer part than in the center. Therefore in all cases of defective vision the patient is unable to see best where he is looking. When the person with imperfect vision sees the peripheral field clearest, it is not as clear as the central field is when the vision is normal.

This condition is sometimes so extreme that the patient may look as far away from an object as it is possible to see it and yet see it just as well as when looking directly at it. In one case it had gone so far that the patient could see only with the edge of the retina on the nasal side. In other words, she could not see her fingers in front of her face, but could see them if she held them at the outer side of her eye. She had no error of refraction, showing that while every error of refraction is accompanied by eccentric fixation, the strain which causes the one condition is different from that which produces the other. The patient had been examined by specialists in this country and Europe, who attributed her blindness to disease of the optic nerve, or brain; but the fact that vision was restored by relaxation demonstrated that the condition had been due simply to mental strain.

Eccentric fixation, even in its lesser degrees, is so unnatural that great discomfort, or even pain, can be

produced in a few seconds by trying to see every part of an area three or four inches in extent at twenty feet, or even less, or an area of an inch or less at the near point, equally well at one time, while at the same time the retinoscope will demonstrate that an error of refraction has been produced. This strain, when it is habitual, leads to all sorts of abnormal conditions and is, in fact, at the bottom of most eye troubles, both functional and organic. The discomfort and pain may be absent, however, in the chronic condition, and it is an encouraging symptom when the patient begins to experience them.

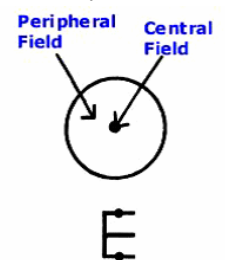
Natural health improvement doctors state; When health or vision is impaired, pain and other symptoms occur. When health/vision impairment increases, sometimes the pain, other uncomfortable symptoms vanish, are not felt. New symptoms may take their place. When healing occurs and the health/vision is reversing back to normal, is being corrected/cured; the old pains, symptoms may temporarily re-appear as the health/vision is passing backwards through previous beginning stages of the health or vision problem. Then, as the health/vision improves to perfect health, clear vision; the pain, symptoms are completely removed. Complete recovery without passing through pain, uncomfortable symptoms can also occur.

The center of the retina, macula and fovea centralis with its many cones produce the clearest vision and brightest color in the center of the visual field. Areas nearest the central field are also very clear-clarity decreasing outward into the peripheral field. The peripheral field of the retina produces less clear vision and less color in the peripheral field of vision. When the vision is normal, clear; the center of the visual field is clearest and the peripheral field less clear. The exact center of the visual field is produced by the fovea centralis and is the size of the pointed end of a pin and produces very clear vision, much clearer than 20/20 and brightest color, fine detailed vision, ability to see very small parts of objects at close and far distances.

Central-fixation – To look at/see one small part of a object clearest at a time in the center of the visual field. Shifting is combined with central-fixation- the eyes, center of the visual field moves, shifts continually from part to part (point to point) on a object to see the object clear. The center of the visual field also moves with the eyes from object to object seeing one object at as time clearest.

Natural Vision Improvement returns perfect clear central vision and brings the peripheral to its maximum clarity.

When the eye possesses central-fixation it not only possesses perfect sight, but it is perfectly at rest and can be used indefinitely without fatigue. It is open and quiet; no nervous movements are observable; and when it regards a point at the distance the visual axes are parallel. In other words, there are no muscular insufficiencies. This fact is not generally known. The text-books state that muscular insufficiencies occur in eyes having normal sight, but I have never seen such a case. The muscles of the face and of the whole body are also at rest, and when the condition is habitual there are no wrinkles or dark circles around the eyes.



Look at the dot on the top of the E. The dot is in the center of the visual field and is clearest. The dot on the bottom is in the peripheral field and is less clear. Shift dot to dot seeing one dot clearest at a time.

In most cases of eccentric fixation, on the contrary, the eye quickly tires, and its appearance, with that of the face, is expressive of effort or strain. The ophthalmoscope reveals that the eyeball moves at irregular intervals, from side to side, vertically or in other directions. These movements are often so extensive as to be manifest by ordinary inspection, and are sometimes sufficiently marked to resemble nystagmus. Nervous movements of the eyelids may also be noted, either by ordinary inspection, or by lightly touching the lid of one eye while the other regards an object either at the near point or the distance. The visual axes are never parallel, and the deviation from the normal may become so marked as to constitute the condition of **squint**. **Strain, eccentric fixation, diffusion causes squint, crossed, wandering eyes, imperfect convergence, divergence.** Redness of the conjunctiva and of the margins of the lids, wrinkles around the eyes, dark circles beneath them and tearing are other symptoms of eccentric fixation.

Eccentric fixation is a symptom of strain, and is relieved by any method that relieves strain; but in some cases the patient is cured just as soon as he is able to demonstrate the facts of central-fixation. When he comes to realize, through actual demonstration of the fact, that **(when experiencing blur, eccentric fixation, diffusion, not seeing with the center of the visual field)** he does not see best where he is looking, and that when he looks a sufficient distance away from a point **(when the eyes are working correct, relaxed, with central-fixation)** he can see it worse than when he looks directly at it, he becomes able, in some way, to reduce the distance to which he has to look in order to see worse, until he can look directly at the top of a small letter and see the bottom worse, or look at the bottom and see the top worse. The smaller the letter regarded in this way, or the shorter the distance the patient has to look away from a letter in order to see the opposite part indistinctly, the greater the relaxation and the better the sight. When it becomes possible to look at the bottom of a letter and see the top worse, or to look at the top and see the bottom worse, it becomes possible to see the letter perfectly black and distinct. At first such vision may come only in flashes. The letter will come out distinctly for a moment and then disappear. But gradually, if the practice is continued, central-fixation will become habitual. **Seeing objects or a part of a object worse when not looking directly at it—it is less clear because it is in the less clear peripheral field. When looking directly at the object, or part, it is in the central field and is clearest.**

Most patients can readily look at the bottom of the big C and see the top worse; but in some cases it is not only impossible for them to do this, but impossible for them to let go of the large letters at any distance at which they can be seen. In these extreme cases it sometimes requires considerable ingenuity, first to demonstrate to the patient that he does not see best where he is looking, and then to help him to see an object worse when he looks away from it than when he looks directly at it. The use of a strong light as one of the points of fixation, or of two lights five or ten feet apart, has been found helpful, the patient when he looks away from the light being able to see it less bright more readily than he can see a black letter worse when he looks away from it. It then becomes easier for him to see the letter worse when he looks away from it. This method was successful in the following case:

A patient with vision of 3/200, when she looked at a point a few feet away from the big C, said she saw the letter better than when she looked directly at it. Her attention was called to the fact that her eyes soon became tired and that her vision soon failed when she saw things in this way. Then she was directed to look at a bright object about three feet away from the card, and this attracted her attention to such an extent that she became able to see the large letter on the test card worse, after which she was able to look back at it and see it better. It was demonstrated to her that she could do one of two things: look away and see the letter better than she did before, or look away and see it worse. She then became able to see it worse all the time when she looked three feet away from it. Next she became able to shorten the distance successively to two feet, one foot and six inches, with a constant improvement in vision; and finally she became able to look at the bottom of the letter and see the top worse, or look finally she became able to read the ten line at twenty feet. By the same method also she became able to read diamond type, first at twelve inches and then at three inches. By these simple measures alone she became able, in short, to see best where she was looking, and her cure was complete.

The highest degrees of eccentric fixation occur in the high degrees of myopia, and in these cases, since the sight is best at the near point, the patient is benefited by practicing seeing worse at this point. The distance can then be gradually extended until it becomes possible to do the same thing at twenty feet. One patient with a high degree of myopia said that the farther she looked away from an electric light the better she saw it, but by alternately looking at the light at the near point and looking away from it she became able, in a short time, to see it brighter when she looked directly at it than when she looked away from it. Later she became able to do the same thing at twenty feet, and then she experienced a wonderful feeling of relief. No words, she said, could adequately describe it. Every nerve seemed to be relaxed, and a feeling of comfort and rest permeated her whole body. Afterward her progress was rapid. She soon became able to look at one part of the smallest letters on the card and see the rest worse, and then she became able to read the letters at twenty feet.

On the principle that a burnt child dreads the fire, some patients are benefited by consciously making their sight worse. When they learn, by actual demonstration of the facts, just how their visual defects are produced, they unconsciously avoid the unconscious strain which causes them. When the degree of eccentric fixation is not too extreme to be increased, therefore, it is a benefit to patients to teach them how to increase it. **When a patient has consciously lowered his vision and produced discomfort and even pain by trying to see the big C, or a whole line of letters, equally well at one time, he becomes better able to correct the unconscious effort of the eye to see all parts of a smaller area equally well at one time.** (Experience strain=learn to avoid it.)

**In learning to see best where he is looking it is usually best for the patient to think of the point not directly regarded as being seen less distinctly than the point he is looking at, instead of thinking of the point fixed as being seen best, as the latter practice has a tendency, in most cases, to intensify the strain under which the eye is already laboring.** One part of an object is seen best only when the mind is content to see the greater part of it indistinctly, and as the degree of relaxation increases the area of the part seen worse increases until that seen best becomes merely a point. (Exact center of visual field, fovea centralis, much clearer than 20/20.)

The limits of vision depend upon the degree of central-fixation. A person may be able to read a sign half a mile away when he sees the letters all alike, but when taught to see one letter best he will be able to read smaller letters that he didn't know were there. **The remarkable vision of savages, who can see with the naked eye objects for which most civilized persons require a telescope, is a matter of central-fixation.** Some people can see the rings of Saturn, or the moons of Jupiter, with



**Look at/see clearest - one part (dot) of the C at a time, in the center of the visual field. The part (dot) in the peripheral field is less clear.**

the naked eye. It is not because of any superiority in the structure of their eyes, but because they have attained a higher degree of central-fixation than most civilized persons do.

Not only do all errors of refraction and all functional disturbances of the eye disappear when it sees by central-fixation, but many organic conditions are relieved or cured. I am unable to set any limits to its possibilities. I would not have ventured to predict that glaucoma, incipient cataract and syphilitic iritis could be cured by central-fixation; but it is a fact that these conditions have disappeared when central-fixation was attained. Relief was often obtained in a few minutes, and sometimes this relief was permanent. Usually, however, a permanent cure required more prolonged treatment. Inflammatory conditions of all kinds, including inflammation of the cornea, iris, conjunctiva, the various coats of the eyeball and even the optic nerve itself, have been benefited by central-fixation after other methods had failed. Infections, as well as diseases caused by protein poisoning and the poisons of typhoid fever, influenza, syphilis and gonorrhoea, have also been benefited by it. Even with a foreign body in the eye there is no redness and no pain so long as central-fixation is retained.

Since central-fixation is impossible without mental control, central-fixation of the eye means central-fixation of the mind. It means, therefore, health in all parts of the body, for all the operations of the physical mechanism depend upon the mind. Not only the sight, but all the other senses - touch, taste, hearing and smell - are benefited by central-fixation. All the vital processes - digestion, assimilation, elimination, etc. - are improved by it. The symptoms of functional and organic diseases are relieved. The efficiency of the mind is enormously increased. The benefits of central-fixation already observed are, in short, so great that the subject merits further investigation.

#### Central-Fixation Example:

Look at the top part of the letter C. Place it in the center of the visual field. Shift on it to avoid staring. While looking at that part, in the center of the visual field; that part is clearest. Other parts of the C away from the part the eyes are looking directly at are in the peripheral field are seen worse, less clear.

When the eyes move, shift to a new part, example; a part on the bottom of the C; this part is now in the center of the visual field, is clearest and the top of the C and other parts are in the peripheral field, away from the central field and are seen less clear.

Shift from part to part on the C and see one small part at a time clearest in the center of the visual field - Central-fixation.

Practice on large, then smaller letters, any objects, then on small objects, a fine print letter.

When the eyes can shift: small point to small point on a small object, small part of a object, fine print letter and use central-fixation, vision is very clear.

Central-fixation must be combined with shifting; shifting from point to point.

Central-fixation does not mean to fix the eyes immobile on a point.

Eccentric fixation is; Diffusion - trying to see two or more objects or more than one part of a object at the same time, objects in the central and peripheral field equally clear at the same time, not shifting from part to part, object to object, to space the visual attention out to cover the entire field without moving the eyes. Using the peripheral area of the retina and field of vision to see with, placing the object of visual attention in the peripheral field.

### A TEACHER'S EXPERIENCES

A teacher forty years of age was first treated on March 28, 1919. She was wearing the following glasses: O. D. convex 0.75 D. S. with convex 4.00 D. C., 105 deg.; O. S. convex 0.75 D. S. with convex 3.50 D. C., 105 deg. On June 9, 1919, she wrote:

I will tell you about my eyes, but first let me tell you other things. You were the first to unfold your theories to me, and I found them good immediately - that is, I was favorably impressed from the start. I did not take up the cure because other people recommended it, but because I was convinced: first, that you believed in your discovery yourself; second, that your theory of the cause of eye trouble was true. I don't know how I knew these two things, but I did. After a little conversation with you, you and your discovery both seemed to me to bear the earmarks of the genuine article. As to the success of the method with myself I had a little doubt. You might cure others, but you might not be able to cure me, However, I took the plunge, and it has made a great change in me and my life.

To begin with, I enjoy my sight. I love to look at things, to examine them in a leisurely, thorough way, much as a child examines things. I never realized it at the time, but it was irksome for me to look at things when I was wearing glasses, and I did as little of it as possible. The other day, going down on the Sandy Hook boat, I enjoyed a most wonderful sky without that hateful barrier, of misted glasses, and I am positive I distinguished delicate shades of color that I never would have been able to see, even with clear glasses. Things seem to me now to have more form, more reality than when I wore glasses. Looking into the mirror you see a solid representation on a flat surface, and the flat glass can't show you anything really solid. My eye-glasses, of course, never gave me this impression, but one curiously like it. I can see so clearly without them that it is like looking around corners without changing the position. I feel that I can almost do it.

I very seldom have occasion to **palm**.<sup>9</sup> Once in a great while I feel the necessity of it. The same with **remembering a period**.

<sup>10</sup> Nothing else is ever necessary. I seldom think of my eyes, but at times it is borne in upon me how much I do use and enjoy using them.

My nerves are much better. I am more equable, have more poise, am less shy. I never used to show that I was shy, or lacked confidence.

I used to go ahead and do what was required, if not without hesitation, but it was hard. Now I find it easy. Glasses, or poor sight rather, made me self-conscious. It certainly is a great defect and one people are sensitive to without realizing it. I mean the poor sight and the necessity for wearing glasses. I put on a pair of glasses the other day just for an experiment, and I found that they magnified things. My skin looked as if under a magnifying glass. Things seemed too near. The articles on my chiffonier looked so

close I felt like pushing them away from me. The glasses I especially wanted to push away. They brought irritation at once. I took them off and felt peaceful. Things looked normal.

I see better in the street than I ever did with glasses. I can see what people look like across the street, can distinguish their features, etc., a thing I could not do with glasses, or before I wore them. I can see better across the river and further into people's houses across the street.

Not that I indulge, but I noticed an increase of power while looking out of the window in school.

Speaking of school, I corrected an immense pile of examination papers the other day, five hours at a stretch, with an occasional look off the paper and an occasional turn about the room. I felt absolutely no discomfort after it. Two weeks previous to this feat I handled two hundred designs over and over again, looking at each one dozens and dozens of times to note changes and improvement in line and color.

Occasionally, while this work was going on. I had to palm in the mornings on rising.

I use my eyes with as much success writing, though once in a while after a lot of steady writing they are a little bit tired. I can read at night without having to get close to a light. I mention this because last summer I had to sit immediately under the light, or I could not see.

From the beginning of the treatment I could use my eyes pretty well, but they used to tire. I remember making a large Liberty Loan poster two weeks after I took off my glasses, and I was amazed to find I could make the whole layout almost perfectly without a ruler, just as well as with my glasses. When I came to true it up with the ruler I found only the last row of letters a bit out of line at the very end. I couldn't have done better with glasses. However this wasn't fine work. About the same time I sewed a hem at night in a black dress, using a fine needle. I suffered a little for this, but not much. I used to practice my exercises at that time and palm faithfully. Now I don't have to practice, or palm; I feel no discomfort, and I am absolutely unsparing in my use of my eyes. I do everything I want to with them. I shirk nothing, pass up no opportunity of using them. From the first I did all my school work, read every notice, wrote all that was necessary, neglected nothing.

Everything I was called upon to do I attempted. For instance, I had to read President Wilson's "Fourteen Points" in the assembly room without notice in a poor light-unusual wording, too,-and I read it unhesitatingly. I have yet to fail to make good.

Now to sum up the school end of it, I used to get headaches at the end of the month from adding columns of figures necessary to reports, etc. Now I do not get them. I used to get flustered when people came into my room. Now I do not; I welcome them. It is a peasant change to feel this way. And-I suppose this is most important really, though I think of it last-I teach better. I know how to get at the mind and how to make the children see things in perspective. I gave a lesson on the horizontal cylinder recently, which, you know, is not a thrillingly interesting subject, and it was a remarkable lesson in its results and in the grip it got on every girl in the room, stupid and bright. What you have taught me makes me use the memory and imagination more, especially the latter, in teaching.

Now, to sum up the effect of being cured upon my own mind. I am more direct, more definite, less diffused, less vague. In short, I am conscious of being better centered. It is central-fixation of the mind. I saw this in your latest paper, but I realized it long ago and knew what to call it.

### **ARMY OFFICER CURES HIMSELF**

An engineer, fifty-one years of age, had worn glasses since 1896, first for astigmatism, getting stronger ones every couple of years, and then for astigmatism and presbyopia. At one time he asked his oculist and several opticians if the eyes could not be strengthened by exercises, so as to make glasses unnecessary, but they said: "No. Once started on glasses you must keep to them."

When the war broke out he was very nearly disqualified for service in the Expeditionary Forces by his eyes, but managed to pass the required tests, after which he was ordered abroad as an officer in the Gas Service. While there he saw in the Literary Digest of May 2, 1918, a reference to my method of curing defective eyesight without glasses, and on May 11 he wrote to me in part as follows:

At the front I found glasses a horrible nuisance, and they could not be worn with gas masks. After I had been about six months abroad I asked an officer of the Medical Corps about going without glasses. He said I was right in my ideas and told me to try it. The first week was awful, but I persisted and only wore glasses for reading and writing. I stopped smoking at the same time to make it easier on my nerves.

I brought to France two pairs of bow spectacles and two extra lenses for repairs. I have just removed the extra piece for near vision from these extra lenses and had them mounted as pince-nez, with shur-on mounts, to use for reading and writing, so that the only glasses I now use are for astigmatism, the age lens being off. Three months ago I could not read ordinary head-line type in newspapers without glasses.

Today, with a good light, I can read ordinary book type (18 point), held at a distance of eighteen inches from my eyes. Since the first week in February, when I discarded my glasses, I have had no headaches, stomach trouble, or dizziness, and am in good health generally. My eyes are coming back, and I believe it is due to sticking it out. I ride considerably in automobiles and trams, and somehow the idea has crept into my mind that after every trip my eyes are stronger. This, I think, is due to the rapid changing of focus in viewing scenery going by so fast.

Other men have tried this plan on my advice, but gave it up after two or three days. Yet, from what they say, I believe they were not so uncomfortable as I was for a week or ten days.

I believe most people wear glasses because they "coddle" their eyes.

## July, 1919 footnotes

- 1 - Harvard: Manual of Military Hygiene for the Military services of United States, third revised edition 1917, p.195.
- 2 - Report of the Provost Marshal General to the Secretary of War on the First Draft under the Selective Service Act, 1917.
- 3 - Standards of Physical Examination for the Use of Local Boards, District Boards and Medical Advisory Boards under the Selective Service Act, Form 75, issued through office of the Provost Marshal General.
- 4 - Second Report of the Provost Marshal General to the Secretary of War on the Operations of the Selective Service System to December 20, 1918.
- 5 - Everyman's Library, 1908, pp. 166 and 167.
- 6 - Bates: The Cure of Defective Eyesight by Treatment Without Glasses. N. Y. Med. Jour., May 8, 1915. A Study of Images Reflected from the Cornea, Iris, Lens and Sclera. N. Y. Med. Jour., May 18, 1918.
- 7 - Bates: The Imperfect Sight of the Normal Eye. N. Y. Med. Jour., Sept 8, 1917.
- 8 - Bates: The Cause of Myopia. N. Y. Med. Jour., March 16, 1912.
- 9 - By palming is meant the covering of the closed eyes with the palms of the hands in such a way as to exclude all the light, while remembering some color, usually black.
- 10 - Bates: *Memory as an Aid to Vision*. N. Y. Med. Jour., May 24, 1919.

### SCHOOL NUMBER

### BETTER EYESIGHT

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

August, 1919

### How to Use the Snellen Test Card

### FOR THE

### Prevention and Cure of Imperfect Sight in Children

The Snellen Test Card is placed permanently upon the wall of the classroom, and every day the children silently read the smallest letters they can see from their seats with each eye separately, the other being covered with the palm of the hand in such a way as to avoid pressure on the eyeball. This takes no appreciable amount of time, and is sufficient to improve the sight of all children in one week and to cure all errors of refraction after some months, a year, or longer.

Children with markedly defective vision should be encouraged to read the card more frequently.

Records may be kept as follows:

John Smith, 10, Sept. 15, 1918.

R. V. (vision of the right eye) 20/40.

L. V. (vision of the left eye) 20/20.

John Smith, 11, Jan. 1, 1919.

R. V. 20/30.

L. V. 20/15.

### 20/20

**The numerator (top number) of the fraction indicates the distance of the test card from the pupil; The denominator (bottom number) denotes the line read, as designated by the figures printed above the middle of each line of the Snellen Test Card.**

A certain amount of supervision is absolutely necessary. At least once a year some one who understands the method should visit each classroom for the purpose of answering questions, encouraging the teachers to continue the use of the method, and making a report to the proper authorities.

It is not necessary that either the inspector, the teachers, or the children, should understand anything about the physiology of the eye.

Glasses are often prescribed unnecessarily or 'too strong' (over-corrected) due to temporary nervousness, pressure to hurry, limited eye, head, neck, body movement, looking into test equipment during an eye exam. Eye doctors also prefer to prescribe an 'extra strength' to the eyeglass lenses. All eyeglasses, especially strong eyeglass lenses cause fast, increased vision/eye impairment and prescriptions for stronger and stronger lenses.

### A HOUSE BUILT ON SAND

That the results of the present method of treating defects of vision are far from satisfactory is something which no one would attempt to deny. It is well known that many patients wander from one specialist to another, seeking vainly for relief, while others give up in despair and either bear their visual ills as best they may without assistance, or else resort to Christian Science, mental science, osteopathy, physical culture, or some of the other healing cults to which the incompetence of orthodox medicine has given birth. The specialists themselves, having daily to handle each other's failures, are scarcely better satisfied. Privately they criticize each other with great asperity and freedom, and publicly they indulge in much speculation as to the underlying causes of this deplorable state of affairs.

At the recent meeting of the Ophthalmological Section of the American Medical Association, Dr. E. J. Gardiner, of Chicago, in a paper on *The Present Status of Refraction Work*,<sup>1</sup> finds that ignorance is responsible for the largest quota of failure to get satisfactory results from what he calls the "rich heritage" of ophthalmic science, but that a considerable percentage must be



attributed to other causes. Among these causes he enumerates a too great dependence on measuring devices, the delegation of refraction work to assistants, and the tendency to eliminate cycloplegics, in deference to the prejudices of patients who have a natural objection to being incapacitated by "drops."

On the same occasion, Dr. Samuel Theobald, of Johns Hopkins University, noted a tendency to "minimize the importance of muscular anomalies" as an important cause of many failures to give relief to eye patients. Among cases that have come into his hands after glasses had been prescribed by other ophthalmologists he has often found that "though great pains had been taken to correct even minor faults of refraction, grave muscular errors had been entirely overlooked." From this fact and from the small number of latent muscular defects noted in the hospital reports which he has examined, the conclusion seems to him inevitable that such faults are in large measure ignored.

Dr. Walter Pyle, of Philadelphia, laid stress on "necessary but often neglected refinements in examination of ocular refraction." "Long practice, infinite care and attention to finer details," he said, "are imperative requisites, since a slight fault in the correction of a refractive error aggravates rather than relieves the accompanying asthenopic symptoms." This care, he says, must be exercised not only by the oculist but by the optician, and to the end that the latter may be inspired to do his part, he suggests that the oculist provide himself with the means for keeping tabs on him in the form of a mechanical lens measure, axis finder and centering machine.

Dr. Charles Emerson, of the Indiana University School of Medicine, suggested a closer co-operation between the ophthalmologist and the physician, as there were many patients who could not be helped by the ophthalmologist alone.

The fitting of glasses by opticians is usually condemned without qualification, but in the discussion which followed these papers, Dr. Dunbar Roy, of Atlanta, said that the optician, just because he does not use cycloplegics, frequently fits patients with comfortable glasses where the ophthalmologist has failed. When a patient needs glasses, said Dr. Roy, he needs them when his eyes are in their natural or normal condition and not when the muscle of accommodation is partially paralyzed. Even the heavy frames used in the adjustment of trial lenses were not forgotten in the search for possible causes of failure, Dr. Roy believing that the patient is often so annoyed by these contrivances that he does not know which is causing him the most discomfort, the frames or the glasses.

Nowhere in the whole discussion was there any suggestion that this great mass of acknowledged failure could possibly be due to any defect in fundamental principles. These are a "rich heritage," the usefulness of which is not to be questioned. If they do not produce satisfactory results, it must be due to their faulty application, and it is taken for granted that there are a select few who understand and are willing to take the trouble to use them properly.

The simple fact, however, is that the fitting of glasses can never be satisfactory. The refraction of the eye is continually changing.<sup>2</sup> Myopia, hypermetropia and astigmatism come and go, diminish and increase, and the same adjustment of glasses cannot suit the affected eyes at all times. One may be able, in many cases, to make the patient comfortable, to improve his sight, or to relieve nervous symptoms; but there will always be a considerable number of persons who get little or no help from glasses, while practically everyone who wears them is more or less dissatisfied. The optician may succeed in making what is considered to be a satisfactory adjustment, and the most eminent ophthalmologist may fail. I personally know of one specialist, a man of international reputation, who fitted a patient sixty times with glasses without affording him the slightest relief.

And even when the glasses do what is expected of them they do very little. Considering the nature of the superstructure built on the foundation of Donders, and the excellent work being done by leading men, Dr. Gardiner thinks the present status of refraction work might be deemed eminently satisfactory if it were not for the great amount of bad and careless work being done; but I do not consider it satisfactory when all we can do for people with imperfect sight is to give them eye crutches that do not even check the progress of the trouble, when the only help we can offer to the millions of myopic and hypermetropic and astigmatic and squinting children in our schools is to put spectacles on them. If this is the best that ophthalmology can do after building for three-quarters of a century upon the foundation of Donders, is it not time that we began to examine that foundation of which Dr. Gardiner boasts that "not one stone has been removed"? Instead of seeking the cause of our failure to accomplish even the little we claim to be able to do in the ignorance and carelessness of the average practitioner, great as that ignorance and carelessness often are; in the neglect of cycloplegics and the refinements of lens adjustment: in the failure to detect latent muscular anomalies; in the absence of co-operation between specialist and general practitioner: would it not be wiser to examine the foundation of our superstructure and see whether it is of stone or of sand?

## **THE PREVENTION OF MYOPIA**

### **Methods That Failed**

The publication in 1867 by Professor Hermann Cohn of Breslau of a study of the eyes of ten thousand school children first called general attention to the fact that while myopia is seldom found in the pre-school age, the defect increases steadily both in percentage of cases and in degree during the educational period. Professor Cohn's investigations were repeated in all the advanced countries, and his observations, with some difference in percentages, were everywhere confirmed. The conditions were unanimously attributed to the excessive use of the eyes for near work, and as it was impossible to abandon the educational system, attempts were made to minimize the supposed evil effects of the reading, writing and other near work which it demanded. Careful and detailed rules were laid down by various authorities as to the size of type to be used in school books, the length of the lines, their distance apart, the distance at which the book should be held, the amount and arrangement of the light, the construction of the desks, the length of time the eyes might be used without a change of focus, etc. Face rests were even devised to hold the eyes at the prescribed distance from the desk and to prevent stooping, which was supposed to cause congestion of the eyeball and thus to encourage elongation. The Germans, with characteristic thoroughness, actually used these instruments of torture, Cohn never allowing his children to write without one, "even at the best possible desk."<sup>3</sup>

The results of these preventive measures were disappointing. Some observers reported a slight decrease in the percentage of myopia in schools in which the prescribed reforms had been made; but on the whole, as Risley has observed in his discussion of the subject in Norris and Oliver's *System of Diseases of the Eye*, "the injurious effects of the educational process were not noticeably arrested."

"It is a significant, though discouraging fact," he continues, "that the increase, as found by Cohn, both in the percentage and in the degree of myopia, had taken place in those schools where he had especially exerted himself to secure the introduction of hygienic forms, and the same is true of the observations of Just, who had examined the eyes of twelve hundred and twenty-nine of the pupils of the two High Schools of Zittau, in both of which the hygienic conditions were all that could be desired. He found, nevertheless, that the excellent arrangements had not in any degree lessened the percentage of increase in myopia. It became necessary, therefore, to look beyond faulty hygienic environments for the cause of the pathological states represented by Myopia."<sup>4</sup>

With the passage of time further evidence to the same effect has steadily accumulated. In an investigation in London, for instance, in which the schools were carefully selected to reveal any difference that might arise from the various influences, hygienic, social and racial, to which the children were subjected, the proportion of myopia in the best lighted and ventilated school of the group was actually found to be higher than in the one where these conditions were worst.<sup>5</sup> It has also been found that there is just as much myopia in schools where little near work is done as in those in which the demands upon the accommodative power of the eye are greater, while in any case it is only a minority of the children in any school who become myopic, although all may be exposed to practically the same eye conditions. Dr. Adolf Steiger, in his recent book on *Spherical Refraction*, bears witness, after a comprehensive survey of the whole question, to the "absolutely negative results of school hygiene," and Dr. Sidler-Huguenin reports<sup>7</sup> that in the thousands of cases that have come under his care he has observed no appreciable benefit from any method of treatment at his command.

Facts of this sort have led to a modification of the myopia theory, but have produced no change in methods of myopia prevention. An hereditary tendency toward the development of the defect is now assumed by most authorities; but although no one has ever been able to offer even a plausible explanation for its supposed injuriousness, and though its restriction has been proven over and over again to be useless, near work is still generally held to be a contributing cause and ophthalmologists still go on in the same old way, trying to limit the use of the eyes at the near-point and encourage vision at the distance. It is incomprehensible that men calling themselves scientific, and having had at least a scientific training, can be so foolish. One might excuse a layman for such irrational conduct, but how men of scientific repute who are supposed to write authoritative textbooks can go on year after year copying each other's mistakes and ignoring all facts which are in conflict with them is a thing which reasonable people can hardly be expected to understand.

In 1912,<sup>8</sup> and a good many times since, I published the observation that myopia is always lessened when the subject strains to see at the near point, and always produced in the normal eye when the subject strains to see at the distance. These observations are of the greatest practical importance, for if they are correct, they prove our present methods of preventing myopia to be a monumental blunder. Yet no one, so far as I have heard, has taken the trouble to test their accuracy. I challenged the medical profession to produce a single exception to the statements I made in the 1912 publication, and that challenge has stood for seven years, although every member of the Ophthalmological Section of the American Medical Association must have had an opportunity to see it, and anyone who knows how to use a retinoscope could have made the necessary tests in a few minutes. If any did this, they failed to publish the results of their observations, and are, therefore, responsible for the effects of their silence. If they found that I was right and neglected to say so, they are responsible for the fact that the benefits that must ultimately result from this discovery have been delayed. If they found that I was wrong, they are responsible for any harm that may have resulted from their indifference.

## **THE PREVENTION AND CURE OF MYOPIA AND OTHER ERRORS OF REFRACTION**

### **A Method That Succeeded**

You cannot see anything with perfect sight unless you have seen it before. When the eye looks at an unfamiliar object it always strains more or less to see that object, and an error of refraction is always produced. When children look at unfamiliar writing, or figures, on the blackboard, distant maps, diagrams, or pictures, the retinoscope always shows that they are myopic, though their vision may be under other circumstances absolutely normal. The same thing happens when adults look at unfamiliar distant objects. When the eye regards a familiar object, however, the affect is quite otherwise. Not only can it be regarded without strain, but the strain of looking later at unfamiliar objects is lessened.

This fact furnishes us with a means of overcoming the mental strain to which children are subjected by the modern educational system. It is impossible to see anything perfectly when the mind is under a strain, and if children become able to relax when looking at familiar objects, they become able, sometimes in an incredibly brief space of time, to maintain their relaxation when looking at unfamiliar objects.

I discovered this fact while examining the eyes of 1,500 school children at Grand Forks, N. D., in 1903.<sup>9</sup> In many cases children who could not read all of the letters on the Snellen test card at the first test read them at the second or third test. After a class had been examined the children who had failed would sometimes ask for a second test, and then it often happened that they would read the whole card with perfect vision. So frequent were these occurrences that there was no escaping the conclusion that in some way the vision was improved by reading the Snellen test card. In one class I found a boy who at first appeared to be very myopic, but who, after a little encouragement, read all the letters on the test card. The teacher asked me about this boy's vision, because she had found him to be very "near-sighted." When I said that his vision was normal she was incredulous, and suggested that he might have learned the letters by heart, or been prompted by another pupil. He was unable to read the writing or figures on the blackboard, she said, or to see the maps, charts, and diagrams on the walls, and did not recognize people across the street. She asked me to test his sight again, which I did, very carefully, under her supervision, the sources of error which she had suggested being eliminated. Again the boy read all the letters on the card. Then the teacher tested his sight. She wrote some words and figures on the blackboard and asked him to read them. He did so correctly. Then she wrote additional words and figures, which he read equally well. Finally she asked him to tell the hour by the clock twenty-five feet distant, which he did correctly. It was a dramatic situation, both the teacher and the children being intensely interested. Three other cases in the class were similar, their vision, which had previously been very defective for distant objects, becoming normal in the few moments devoted to testing their eyes. It is not surprising that after such a demonstration the teacher asked to have a Snellen test card placed permanently in the room.

**The children were directed to read the smallest letters they could see from their seats at least once every day, with both eyes together and with each eye separately, the other being covered with the palm of the hand in such a way as to avoid pressure on the eyeball. (Use of eye patch is best so the hand does not need to be held up – holding the hand up to eye causes the muscles in the hand, arm, shoulder, neck, then eyes to become tense.)**

Those whose vision was defective were encouraged to read it more frequently, and in fact needed no encouragement to do so after they found that the practice helped them to see the blackboard, and stopped the headaches, or other discomfort, previously resulting from the use of their eyes.

In another class of forty children, between six and eight, thirty of the pupils gained normal vision while their eyes were being tested. The remainder were cured later under the supervision of the teacher by exercises in distant vision with the Snellen card. This teacher had noted every year for fifteen years that at the opening of the school in the fall all the children could see the writing on the blackboard from their seats, but before school closed the following spring all of them without exception complained that they could not see it at a distance of more than ten feet. After learning of the benefits to be derived from the daily practice of distant vision with familiar objects as the points of fixation, this teacher kept a Snellen test card continually in her classroom and directed the children to read it every day. The result was that for eight years no more of the children under her care acquired defective eyesight.

This teacher had attributed the invariable deterioration in the eyesight of her charges during the school year to the fact that her classroom was in the basement and the light poor. But teachers with well-lighted classrooms had the same experience, and after the Snellen test card was introduced into both the well-lighted and the poorly lighted rooms, and the children read it every day, the deterioration of their eyesight not only ceased, but the vision of all improved. Vision which had been below normal improved, in most cases, to normal, while children who already had normal sight, usually reckoned at 20/20, became able to read 20/15 or 20/10. And not only was myopia cured, but the vision for near objects was improved.

At the request of the superintendent of the schools of Grand Forks, Mr. J. Nelson Kelly, the system was introduced into all the schools of the city and was used continuously for eight years, during which time it reduced myopia among the children, which I found at the beginning to be about six per cent, to less than one per cent.

In 1911 and 1912 the same system was introduced into some of the schools of New York City<sup>10</sup> with an attendance of about ten thousand children. Many of the teachers neglected to use the cards, being unable to believe that such a simple method, and one so entirely at variance with previous teaching on the subject, could accomplish the desired results. Others kept the cards in a closet except when they were needed for the daily eye drill, lest the children should memorize them. Thus they not only put an unnecessary burden upon themselves, but did what they could to defeat the purpose of the system, which is to give the children **daily exercise in distant vision with a familiar object as the point of fixation**. A considerable number, however, used the system intelligently and persistently, and in less than a year were able to present reports showing that of three thousand children with imperfect sight over one thousand had obtained normal vision by its means. Some of these children, as in the case of the children of Grand Forks, were cured in a few minutes. Many of the teachers were also cured, some of them very quickly. In some cases the results of the system were so astonishing as to be scarcely credible.

In a class of mental defectives, where the teacher had kept records of the eyesight of the children for several years, it had been invariably found that their vision grew steadily worse as the term advanced. As soon as the Snellen test card had been introduced, however, they began to improve. Then came a doctor from the Board of Health who tested the eyes of the children and put glasses on all of them, even those whose sight was fairly good. The use of the card was then discontinued, as the teacher did not consider it proper to interfere while the children were wearing glasses prescribed by a physician. Very soon, however, the children began to lose, break, or discard, their glasses. Some said that the spectacles gave them headaches, or that they felt better without them. In the course of a month or so most of the aids to vision which the Board of Health had supplied had disappeared. The teacher then felt herself at liberty to resume the use of the Snellen test card. Its benefits were immediate. The eyesight and the mentality of the children improved simultaneously, and soon they were all drafted into the regular classes, because it was found that they were making the same progress in their studies as the other children were.

Another teacher reported an equally interesting experience. She had a class of children who did not fit into the other grades. Many of them were backward in their studies. Some were persistent truants. All of them had defective eyesight. A Snellen test card was hung in the classroom where all the children could see it, and the teacher carried out my instructions literally. At the end of six months all but two had been cured and these had improved very much, while the worst incorrigible and the worst truant had become good students. The incorrigible, who had previously refused to study, because, he said, it gave him a headache to look at a book, or at the blackboard, found out that the test card, in some way, did him a lot of good; and although the teacher had asked him to read it but once a day, he read it whenever he felt uncomfortable. The result was that in a few weeks his vision had become normal and his objection to study had disappeared. The truant had been in the habit of remaining away from school two or three days every week, and neither his parents nor the truant officer had been able to do anything about it. To the great surprise of his teacher he never missed a day after having begun to read the Snellen test card. When she asked for an explanation he told her that what had driven him away from school was the pain that came in his eyes whenever he tried to study, or to read the writing on the blackboard. After reading the Snellen test card, he said, his eyes and head were rested and he was able to read without any discomfort.

To remove any doubts that might arise as to the cause of the improvement noted in the eyesight of the children comparative tests were made with and without cards. In one case six pupils with defective sight were examined daily for one week without the use of the test card. No improvement took place. The card was then restored to its place and the group was instructed to read it every day. At the end of a week all had improved and five were cured. In the case of another group of defectives the results were similar. During the week that the card was not used no improvement was noted, but after a week of exercises in distant vision with the card all showed marked improvement, and at the end of a month all were cured. In order that there might be no question as to the reliability of the records of the teachers some of the principals asked the Board of Health to send an inspector to test the vision of the pupils, and whenever this was done the records were found to be correct. **Dr. Bates has the children read the eyechart with both eyes together, then one eye at a time, then both eyes together again. He also has the children look close and distant, shifting on exact letters on two identical eyecharts placed at close and far distances. Also done with both eyes together, then one eye at a**

time, then both eyes together again. If vision needs more improvement in one eye, extra time is spent practicing with that eye to bring the vision equally clear, perfect in both left and right eyes. [Basic Behavioral Optometry.](#)

One day I visited the city of Rochester, and while there I called on the Superintendent of Public Schools and told him about my method of preventing myopia. He was very much interested and invited me to introduce it in one of his schools. I did so, and at the end of three months a report was sent to me showing that the vision of all the children had improved, while quite a number of them had obtained perfect sight in both eyes.

The method has been used in a number of other cities and always with the same result. The vision of all the children improved, and many of them obtained perfect sight in the course of a few minutes, days, weeks or months.

It is difficult to prove a negative proposition, but since this system improved the vision of all the children who used it, it follows that none could have grown worse. It is therefore obvious that it must have prevented myopia. This cannot be said of any method of preventing myopia in schools which had previously been tried. All other methods are based on the idea that it is the excessive use of the eyes for near work that causes myopia, and all of them have admittedly failed.

It is also obvious that the method must have prevented other errors of refraction, a problem which previously had not even been seriously considered, because hypermetropia is supposed to be congenital, and astigmatism was until recently supposed also to be congenital in the great majority of cases. Anyone who knows how to use a retinoscope may, however, demonstrate in a few minutes that both of these conditions are acquired; for no matter how astigmatic or hypermetropic an eye may be, its vision always becomes normal when it looks at a blank surface without trying to see. It may also be demonstrated that when children are learning to read, write, draw, sew, or to do anything else that necessitates their looking at unfamiliar objects at the near-point, hypermetropia, or hypermetropic astigmatism, is always produced. The same is true of adults. These facts have not been reported before, so far as I am aware, and they strongly suggest that children need, first of all, eye education. They must be able to look at strange letters or objects at the near-point without strain before they can make much progress in their studies, and in every case in which the method has been tried it has proven that this end is attained by daily exercise in distant vision with the Snellen test card. When their distant vision has been improved by this means children invariably become able to use their eyes without strain at the near-point.

The method succeeded best when the teacher did not wear glasses. In fact, the effect upon the children of a teacher who wears glasses is so detrimental that no such person should be allowed to be a teacher, and since errors of refraction are curable, such a ruling would work no hardship on anyone. Not only do children imitate the visual habits of a teacher who wears glasses, but the nervous strain of which the defective sight is an expression produces in them a similar condition. In classes of the same grade, with the same lighting, the sight of children whose teachers did not wear glasses has always been found to be better than the sight of children whose teachers did wear them. In one case I tested the sight of children whose teacher wore glasses and found it very imperfect. The teacher went out of the room on an errand, and after she had gone I tested them again. The results were very much better. When the teacher returned she asked about the sight of a particular boy, a very nervous child, and as I was proceeding to test him she stood before him and said, "Now, when the doctor tells you to read the card, do it." The boy couldn't see anything. Then she went behind him, and the effect was the same as if she had left the room. The boy read the whole card.

Still better results would be obtained if we could reorganize the educational system on a rational basis. Then we might expect a general return of that **primitive acuity of vision** which we marvel at so greatly when we read about it in the memoirs of travelers. But even under existing conditions it has been proven beyond the shadow of a doubt that errors of refraction are no necessary part of the price we must pay for education.

There are at least ten million children in the schools of the United States who have defective sight. This condition prevents them from taking full advantage of the educational opportunities which the State provides. It undermines their health and wastes the taxpayers' money. If allowed to continue, it will be an expense and a handicap to them throughout their lives. In many cases it will be a source of continual misery and suffering. And yet practically all of these cases could be cured and the development of new ones prevented by the daily reading of the Snellen test card.

Why should our children be compelled to suffer and wear glasses for want of this simple measure of relief? It costs practically nothing. In fact, it would not be necessary, in some cases, as in the schools of New York City, even to purchase the Snellen test cards, as they are already being used to test the eyes of the children. Not only does it place practically no additional burden upon the teachers, but, by improving the eyesight, health, disposition and mentality of their pupils, it greatly lightens their labors. No one would venture to suggest, further, that it could possibly do any harm. Why, then, should there be any delay about introducing it into the schools? If there is still thought to be need for further investigation and discussion, we can investigate and discuss just as well after the children get the cards as before, and by adopting that course we will not run the risk of needlessly condemning another generation to that curse which heretofore has always dogged the footsteps of civilization, namely, defective eyesight. I appeal to all who read these lines to use whatever influence they possess toward the attainment of this end.

[Native American Indians had perfect eyesight and health before they were forced into the white mans culture, schools, religion diet. Modern Indians are now reclaiming their heritage. An American Indian would be a great U.S. President. This book is free for Native American Indians to read, distribute, sell.](#)

#### THE STORY OF EMILY

**[Children cured of defective eyesight by Dr. Bates, teach the Bates Method, cure defective sight; blur, astigmatism, cataract, crossed eyes in other children.](#)**

The efficacy of the method of treating imperfect sight without glasses has been demonstrated in thousands of cases, not only in my own practice but in that of many persons of whom I may not even have heard; for almost all patients when they are cured proceed to cure others. At a social gathering one evening a lady told me that she had met a number of my patients; but when she mentioned their names, I found that I did not remember any of them, and said so.

"That is because you cured them by proxy," she said. "You didn't directly cure Mrs. Jones or Mrs. Brown, but you cured Mrs. Smith and Mrs. Smith cured the other ladies. You didn't treat Mr. and Mrs. Simpkins or Mr. Simpkins' mother and brother, but you

may remember that you cured Mr. Simpkins' boy of a squint, and he cured the rest of the family."

**In schools where the Snellen test card was used to prevent and cure imperfect sight, the children, after they were cured themselves, often took to the practice of ophthalmology with the greatest enthusiasm and success, curing their fellow students, their parents and their friends.** They made a kind of game of the treatment, and the progress of each school case was watched with the most intense interest by all the children. On a bright day, when the patients saw well, there was great rejoicing, and on a dark day there was corresponding depression. One girl cured twenty-six children in six months; another cured twelve in three months; a third developed quite a varied ophthalmological practice and did things of which older and more experienced practitioners might well have been proud. Going to the school which she attended one day, I asked this girl about her sight, which had been very imperfect. She replied that it was now very good, and that her headaches were quite gone. I tested her sight and found it normal. Then another child whose sight had also been very poor spoke up,

"I can see all right too," she said. "Emily"—indicating girl No. 1—"cured me."

"Indeed?" I replied. "How did she do that?"

The second girl explained that Emily had had her read the card, which she could not see at all from the back of the room, at a distance of a few feet. The next day she had moved it a little further way, and so on, until the patient was able to read it from the back of the room, just as the other children did. Emily now told her to cover the right eye and read the card with her left, and both girls were considerably upset to find that the **uncovered eye was apparently blind**. The school doctor was consulted and said that nothing could be done. The eye had been blind from birth and no treatment would do any good.

Nothing daunted, however, Emily undertook the treatment. She told the patient to cover her good eye and go up close to the card, and at a distance of a foot or less it was found that she could read even the small letters. The little practitioner then proceeded confidently as with the other eye, and after many months of practice the patient became the happy possessor of normal vision in both eyes. The case had, in fact, been simply one of high myopia, and the school doctor, not being a specialist, had not detected the difference between this condition and blindness.

In the same classroom, there had been a little girl with congenital **cataract**, but on the occasion of my visit the defect had disappeared. This, too, it appeared, was Emily's doing. The school doctor had said that there was no help for this eye except through operation, and as the sight of the other eye was pretty good, he fortunately did not think it necessary to urge such a course. Emily accordingly took the matter in hand. She had the patient stand close to the card, and at that distance it was found that she could not see even the big C. Emily now held the card between the patient and the light and moved it back and forth. At a distance of three or four feet this movement could be observed indistinctly by the patient. The card was then moved farther away, until the patient became able to see it move at ten feet and to see some of the larger letters indistinctly at a less distance. Finally, after six months, she became able to read the card with the bad eye as well as with the good one. After testing her sight and finding it normal in both eyes, I said to Emily

"You are a splendid doctor. You beat them all. Have you done anything else?"

The child blushed, and turning to another of her classmates, said:

"Mamie, come here."

Mamie stepped forward and I looked at her eyes. There appeared to be nothing wrong with them.

"I cured her," said Emily.

"What of?" I inquired.

"**Cross eyes**," replied Emily.

"How," I asked, with growing astonishment.

Emily described a procedure very similar to that adopted in the other cases. Finding that the sight of the **crossed eye** was very poor, so much so, indeed, that poor Mamie could see practically nothing with it, the obvious course of action seemed to her to be the restoration of its sight; and, never having read any medical literature she did not know that this was impossible. So she went to it. She had Mamie cover her good eye and practice with the bad one at home and at school, until at last the sight became normal and the eye straight. The school doctor had wanted to have the eye operated upon, I was told, but fortunately Mamie was "scared" and would not consent. And here she was with two perfectly good, straight eyes.

"Anything else?" I inquired, when Mamie's case had been disposed of. Emily blushed again, and said:

"Here's Rose. Her eyes used to hurt her all the time, and she couldn't see anything on the blackboard. Her **headaches** used to be so bad that she had to stay away from school every once in a while. The doctor gave her glasses; but they didn't help her, and she wouldn't wear them. When you told us the card would help our eyes I got busy with her. I had her read the card close up, and then I moved it farther away, and now she can see all right, and her head doesn't ache any more. She comes to school every day, and we all thank you very much."

This was a case of **compound hypermetropic astigmatism**. Such stories might be multiplied indefinitely. Emily's astonishing record cannot, it is true, be duplicated, but lesser cures by cured patients have been very numerous and serve to show that the benefits of the method of preventing and curing defects of vision in the schools which is presented in this number of BETTER EYESIGHT would be far-reaching. Not only errors of refraction would be cured, but many more serious defects; and not only the children would be helped, but their families and friends also.

#### August, 1919 -

1 - For reports of all the papers quoted, see Jour. Am. Med. Assoc. June 21, 1919.

2 - Bates: The Imperfect Sight of the Normal Eye, N. Y. Med. Jour., Sept. 8, 1917.

3 - The Hygiene of the Eye in Schools, English translation, edited by Turnbull, p. 127.

4 - System of Diseases of the Eye, 1897. Vol. II, p. 361.

5 - Brit. Med. Jour., June 18, 1898.

6 - Die Entstehung der sphärischen Refraktionen des menschlichen Auges, Berlin, 1913, p. 540.

7 - Archiv f. Augenhk., Vol. LXXIX, 1915, translated in Archives of Ophthalmology, Vol. XLV, No. 6, November 1916.

8 - Bates: The Cause of Myopia, N. Y. Med. Jour., March 16, 1912.

9 - Bates: The Prevention of Myopia in School Children, N. Y. Med. Jour., July 29, 1911.

10 - Bates: Myopia Prevention by Teachers, N. Y. Med. Jour., Aug. 30, 1913.

## BETTER EYESIGHT

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

September, 1919

### THE FLASHING CURE

Do you read imperfectly? Can you observe then that when you look at the first word, or the first letter, of a sentence you do not see best where you are looking; that you see other words, or other letters, just as well as or better than the ones you are looking at? Do you observe also that the harder you try to see the worse you see?

Now close your eyes and rest them, remembering some color, like black or white, that you can remember perfectly. Keep them closed until they feel rested, or until the feeling of strain has been completely relieved. Now open them and **look at the first word or letter of a sentence for a fraction of a second**. If you have been able to relax, partially or completely, you will have a **flash of improved or clear vision**, and the area seen best will be smaller.

After opening the eyes for this fraction of a second, close them again quickly, still remembering the color, and keep them closed until they again feel rested. Then again open them for a fraction of a second. Continue this alternate resting of the eyes and flashing of the letters for a time, and you may soon find that you can keep your eyes open longer than a fraction of a second without losing the improved vision.

If your trouble is with distant instead of near vision, use the same method with distant letters.

In this way you can demonstrate for yourself the fundamental principles of the cure of imperfect sight by treatment without glasses.

If you fail, ask someone with perfect sight to help you.

When looking at a letter: shift on it part to part. Blink. The letter remains clear.

Shift dot to dot (part to part) on the E.

## VISION AND EDUCATION

Poor sight is admitted to be one of the most fruitful causes of retardation in the schools. It is estimated<sup>1</sup> that it may reasonably be held responsible for a quarter of the habitually "left-backs," and it is commonly assumed that all this might be prevented by suitable glasses.

There is much more involved in defective vision, however, than mere inability to see the blackboard, or to use the eyes without pain or discomfort. Defective vision is the result of an abnormal condition of the mind, and when the mind is in an abnormal condition it is obvious that none of the processes of education can be conducted with advantage. By putting glasses upon a child we may, in some cases, neutralize the effect of this condition upon the eyes and by making the patient more comfortable may improve his mental faculties to some extent, but we do not alter fundamentally the condition of the mind and by confirming it in a bad habit we may make it worse.

**It can easily be demonstrated that among the faculties of the mind which are impaired when the vision is impaired is the memory;** and as a large part of the educational process consists of storing the mind with facts, and all the other mental processes depend upon one's knowledge of facts, it is easy to see how little is accomplished by merely putting glasses on a child that has "trouble with its eyes." The **extraordinary memory of primitive people** has been attributed to the fact that owing to the absence of any convenient means of making written records they had to depend upon their memories, which were strengthened accordingly; but in view of the known facts about the relation of memory to eyesight it is more reasonable to suppose that the retentive memory of primitive man was due to the same cause as his **keen vision**, namely, **a mind at rest**.

The primitive memory as well as primitive keenness of vision have been found among civilized people, and if the necessary tests had been made it would doubtless have been found that they always occur together, as they did in a case which recently came under my observation. The subject was a child of ten with such marvelous eyesight that

**she could see the moons of Jupiter with the naked eye**, a fact which was demonstrated by her drawing a diagram of these satellites which exactly corresponded to the diagrams made by persons who had used a telescope. **Her memory was equally remarkable**. She could recite the whole content of a book after reading it, as Lord Macauley is said to have done, and she learned more Latin in a few days without a teacher than her sister who had six diopters of myopia had been able to do in several years. She remembered five years afterward what she ate at a restaurant, she recalled the name of the waiter, the number of the building and the street in which it stood. She also remembered what she wore on this occasion and what every one else in the party wore. The same was true of every other event which had awakened her interest in any way, and it was a favorite amusement in her family to ask her what the menu had been and what people had worn on particular occasions.

When the sight of two persons is different it has been found that their memories differ in exactly the same degree. Two sisters, one of whom had only ordinary good vision, indicated by the formula 20/20, while the other had 20/10, found that the time it took them to learn eight verses of a poem varied in almost exactly the same ratio as their sight. The one whose vision was 20/10 learned eight verses of the poem in fifteen minutes, while the one whose vision was only 20/20 required thirty-one minutes to do the same thing. After palming the one with ordinary vision learned eight more verses in twenty-one minutes, while the one with 20/10 was only able to reduce her time by two minutes, a variation clearly within the limits of error. In other words, the mind of the latter being already in a normal or nearly normal condition, she could not improve it appreciably by palming, while the former whose mind was under a strain was able to gain relaxation, and hence improve her memory, by this means.

**When the two eyes of the same person are different a corresponding difference in the memory has been noted according to whether both eyes were open, or the better eye closed.** A patient with normal vision in the right eye and half-normal vision in the left when looking at the Snellen test card with both eyes open could remember a period for twenty seconds continuously, but could remember it only ten seconds when the better eye was closed. A patient with half-normal vision in the right eye and one-quarter normal in the left could remember a period for twelve seconds with both eyes open and only six seconds with

better eye closed. A third patient with normal sight in the right eye and vision of one-tenth in the left could remember a period twelve seconds with both eyes open and only two seconds when the better eye was closed. In other words if the right eye is better than the left the memory is better when the right eye is open than when only the left eye is open.

Under the present educational system there is a constant effort to compel the children to remember. These efforts always fail. They spoil both the memory and the sight. The memory cannot be forced any more than the vision can be forced. **We remember without effort, just as we see without effort, and the harder we try to remember or see the less we are able to do so.**

**The sort of things we remember are the things that interest us, and the reason children have difficulty in learning their lessons is because they are bored by them. For the same reason, among others, their eyesight becomes impaired, boredom being a condition of mental strain in which it is impossible for the eye to function normally.**

Some of the various kinds of compulsion now employed in the educational process may have the effect of awakening interest. Betty Smith's interest in winning a prize, for instance, or in merely getting ahead of Johnny Jones, may have the effect of rousing her interest in lessons that have hitherto bored her, and this interest may develop into a genuine interest in the acquisition of knowledge; but this cannot be said of the various fear incentives still so largely employed by teachers. These, on the contrary, have the effect, usually, of completely paralyzing minds already benumbed by lack of interest, and the effect upon the vision is equally disastrous.

The fundamental reason, both for poor memory and poor eyesight in school children, in short, is our irrational and unnatural educational system. **Montessori has taught us that it is only when children are interested that they can learn. It is equally true that it is only when they are interested that they can see.** This fact was strikingly illustrated in the case of one of the two pairs of sisters mentioned above. Phebe, of the keen eyes, who could recite whole books if she happened to be interested in them, disliked mathematics and anatomy extremely, and not only could not learn them but became myopic when they were presented to her mind. She could read letters a quarter of an inch high at twenty feet in a poor light, but when asked to read figures one to two inches high in a good light at ten feet she miscalled half of them. When asked to tell how much 2 and 3 made, she said "4," before finally deciding on "5"; and all the time she was occupied with this disagreeable subject the retinoscope showed that she was myopic. When I asked her to look into my eye with the ophthalmoscope she could see nothing, although a much lower degree of visual acuity is required to note the details of the interior of the eye than to see the moons of Jupiter.

Short-sighted Isabel, on the contrary, had a passion for mathematics and anatomy, and excelled in those subjects. She learned to use the ophthalmoscope as easily as Phebe had learned Latin. Almost immediately she saw the optic nerve, and noted that the center was whiter than the periphery. She saw the light-colored lines, the arteries; and the darker ones, the veins; and she saw the light streaks on the blood-vessels. Some specialists never become able to do this, and no one could do it without normal vision. Isabel's vision, therefore, must have been temporarily normal when she did it. Her vision for figures, although not normal, was better than for letters.

In both these cases the ability to learn and the ability to see went hand in hand with interest. Phebe could read a photographic reduction of the Bible and recite what she had read verbatim, she could see the moons of Jupiter and draw a diagram of them afterwards, because she was interested in these things; but she could not see the interior of the eye, nor see figures even half as well as she saw letters, because these things bored her. When, however, it was suggested to her that it would be a good joke to surprise her teachers, who were always reproaching her for her backwardness in mathematics, by taking a high mark in a coming examination, her interest in the subject awakened and she contrived to learn enough to get seventy-eight per cent. In Isabel's case letters were antagonistic. She was not interested in most of the subjects with which they dealt and, therefore, she was backward in those subjects and had become habitually myopic. But when asked to look at objects which aroused an intense interest her vision became normal.

When one is not interested, in short, one's mind is not under control, and without mental control one can neither learn nor see. Not only the memory but all other mental faculties are improved when the eyesight becomes normal. It is a common experience with patients cured of defective sight to find that their ability to do their work has improved.

The teacher whose letter was quoted in the first issue of BETTER EYESIGHT testified that after gaining perfect eyesight she "knew better how to get at the minds of the pupils, was "more direct, more definite, less diffused, less vague," possessed, in fact, "central fixation of the mind." In another letter she said, "The better my eyesight becomes the greater is my ambition. On the days when my sight is best I have the greatest anxiety to do things."

Another teacher reports that one of her pupils used to sit doing nothing all day long and apparently was not interested in anything. After the test card was introduced into the classroom and his sight improved, he became anxious to learn, and speedily developed into one of the best students in the class. In other words his eyes and his mind became normal together.

A bookkeeper nearly **seventy years of age** who had **worn glasses for forty years** found after he had **gained perfect sight without glasses** that he could work more rapidly and accurately and with less fatigue than ever in his life before. During busy seasons, or when short of help, he has worked for some weeks at a time from 7 a. m. until 11 p. m., and he reports that he felt less tired at night after he was through than he did in the morning when he started. Previously, although he had done more work than any other man in the office, it always tired him very much. He also noticed an improvement in his temper. Having been so long in the office and knowing so much more about the business than his fellow employees, he was frequently appealed to for advice. These interruptions, before his sight became normal, were very annoying to him and often caused him to lose his temper. Afterward, however, they caused him no irritation whatever. In the case of another patient whose story is given elsewhere symptoms of insanity were relieved when the vision became normal.

From all these facts it will be seen that the problems of vision are far more intimately associated with the problems of education than we had supposed, and that they can by no means be solved by putting concave, or convex, or astigmatic lenses before the eyes of the children.

## THE DOCTOR'S STORY

One of the most striking cases of the relation of mind to vision that ever came to my attention was that of a physician whose mental troubles, at one time so serious that they suggested to him the idea that he might be going insane, were completely relieved when his sight became normal. He had been seen by many eye and nerve specialists before he came to me and consulted me at last, not because he had any faith in my methods, but because nothing else seemed to be left for him to do. He brought with him quite a collection of glasses prescribed by different men, no two of them being alike. He had worn glasses, he told me, for many months at a time without benefit and then he had left them off and had been apparently no worse. Outdoor life had also failed to help him. On the advice of some prominent neurologists he had even given up his practice for a couple of years to spend the time upon a ranch, but the vacation had done him no good.

I examined his eyes and found no organic defects and no error of refraction. Yet his vision with each eye was only three-fourths of the normal, and he suffered from **double vision and all sorts of unpleasant symptoms**. He used to see people standing on their heads, and little devils dancing on the tops of the high buildings. He also had other **illusions** too numerous to mention in a short paper. At night his sight was so bad that he had difficulty in finding his way about, and when walking along a country road he believed that he saw better when he turned his eyes far to one side and viewed the road with the side of the retina instead of with the center. At variable intervals, without warning and without loss of consciousness, **he had attacks of blindness**. These caused him great uneasiness, for he, was a surgeon with a large and lucrative practice, and he feared that he might have an attack while operating.

His memory was very poor. He could not remember the color of the eyes of any member of his family, although he had seen them all daily for years. Neither could he recall the color of his house, the number of rooms on the different floors, or other details. The faces and names of patients and friends he recalled with difficulty, or not at all.

His treatment proved to be very difficult, chiefly because he had an infinite number of erroneous ideas about physiological optics in general and his own case in particular and insisted that all these should be discussed; while these discussions were going on he received no benefit. Every day for hours at a time over a long period he talked and argued. Never have I met a person whose logic was so wonderful, so apparently unanswerable, and yet so utterly wrong.

His eccentric fixation was of such high degree that when he looked at a point forty-five degrees to one side of the big C on the Snellen test card, he saw the letter just as black as when he looked directly at it. The strain to do this was terrific, and produced much astigmatism; but the patient was unconscious of it, and could not be convinced that there was anything abnormal in the symptom. If he saw the letter at all, he argued, he must see it as black as it really was, because he was not color-blind. Finally he became able to look away from one of the smaller letters on the card and see it worse than when he looked directly at it. It took eight or nine months to accomplish this, but when it had been done the patient said that it seemed as if a great burden had been lifted from his mind. He experienced a wonderful feeling of rest and relaxation throughout his whole body.

When asked to remember black with his eyes closed and covered he said he could not do so, and he saw every color but the black which one ought normally to see when the optic nerve is not subject to the stimulus of light. He had, however, been an enthusiastic football player at college, and he found at last that he could remember a black football. I asked him to imagine that this football had been thrown into the sea and that it was being carried outward by the tide, becoming constantly smaller but no less black. This he was able to do, and the strain floated with the football, until, by the time the latter had been reduced to the size of a period in a newspaper, it was entirely gone. The relief continued as long as he remembered the black spot, but as he could not remember it all the time, I suggested another method of gaining permanent relief. This was to make his sight voluntarily worse, a plan against which he protested with considerable emphasis.

"Good heavens!" he said, "Is not my sight bad enough without making it worse."

After a week of argument, however, he consented to try the method, and the result was extremely satisfactory. After he had learned to see two or more lights where there was only one, by straining to see a point above the light while still trying to see the light as well as when looking directly at it, he became able to avoid the unconscious strain that had produced his double and multiple vision and was not troubled by these superfluous images any more. In a similar manner other illusions were prevented.

One of the last illusions to disappear was his belief that an effort was required to remember black. His logic on this point was overwhelming, but after many demonstrations he was convinced that no effort was required to let go, and when he realized this, both his vision and his mental condition immediately improved.

He finally became able to read 20/10 or more, and although more than fifty-five years of age, he also read diamond type at from six to twenty-four inches. His night blindness was relieved, his attacks of day blindness ceased, and he told me the color of the eyes of his wife and children. One day he said to me:

"Doctor, I thank you for what you have done for my sight; but no words can express the gratitude I feel for what you have done for my mind."

Some years later he called with his heart full of gratitude, because there had been no relapse.

## LYING A CAUSE OF MYOPIA

I may claim to have discovered the fact that telling lies is bad for the eyes. Whatever bearing this circumstance may have upon the universality of defects of vision, it can easily be demonstrated that it is impossible to say what is not true, even with no intent to deceive, or even to imagine a falsehood, without producing an error of refraction.

If a patient can read all the small letters on the bottom line of the test card, and either deliberately or carelessly miscalls any of them, the retinoscope will indicate an error of refraction. In numerous cases patients have been asked to state their ages incorrectly, or to try to imagine that they were a year older, or a year younger, than they actually were, and in every case when they did this the retinoscope indicated an error of refraction. A patient twenty-five years old had no error of refraction when he looked at a blank wall without trying to see; but if he said he was twenty-six, or if someone else said he was twenty-six, or if he tried to imagine that he was twenty-six, he became myopic. The same thing happened when he stated or tried to imagine that he



was twenty-four. When he stated or remembered the truth his vision was normal, but when he stated or imagined an error he had an error of refraction.

Two little girl patients arrived one after the other one day, and the first accused the second of having stopped at Huyler's for an ice-cream soda, which she had been instructed not to do, being somewhat too much addicted to sweets. The second denied the charge, and the first, who had used the retinoscope and knew what it did to people who told lies, said:

"Do take the retinoscope and find out."

"I followed the suggestion, and having thrown the light into the second child's eyes, I asked:

"Did you go to Huyler's?"

"Yes," was the response, and the retinoscope indicated no error of refraction.

"Did you have an ice-cream soda?"

"No," said the child; but the tell-tale shadow moved in a direction opposite to that of the mirror, showing that she had become myopic and was not telling the truth.

The child blushed when I told her this and acknowledged that the retinoscope was right, for she had heard of the ways of the uncanny instrument before and did not know what else it might do to her if she said anything more that was not true.

The fact is that it requires an effort to state what is not true, and this effort always results in a deviation from the normal in the refraction of the eye. So sensitive is the test that if the subject, whether his vision is ordinarily normal, or not, pronounces the initials of his name correctly while looking at a blank surface without trying to see, there will be no error of refraction; but if he miscalls one initial, even without any consciousness of effort, and with full knowledge that he is deceiving no one, myopia will be produced.

### CURED IN FIFTEEN MINUTES

Patients often ask how long it takes to be cured. The answer is that it takes only as long as it takes to relax. If this can be done in five minutes, the patient is cured in five minutes, no matter how great the degree of his error of refraction, or how long its duration. All persons with errors of refraction are able to relax in a few seconds under certain conditions, but to gain permanent relaxation usually requires considerable time. Some persons, however, are able to get it very quickly. These quick cures are very rare, except in the case of children under twelve; but they do occur, and I believe the time is coming when it will be possible to cure everyone quickly. It is only a question of accumulating more facts and presenting them in such a way that the patient can grasp them quickly.

A very remarkable case of a quick cure was that of a man of fifty-five who had worn glasses for thirty years for distant vision and ten years for reading, and whose distant vision at the time he consulted me was 20/200.

When he looked at the Snellen test card the letters appeared grey to him instead of black. He was told that they were black, and the fact was demonstrated by bringing the card close to him. His attention was also called to the fact that the small letters were just as black as the large ones. He was then directed to close and cover his eyes with the palms of his hands, shutting out all the light. When he did this he saw a perfect black, indicating that he had secured perfect relaxation and that the optic nerve and visual centers of the brain were not disturbed. While his eyes were still closed he was asked:

"Do you think that you can remember with your eyes open the perfect black that you now see?"

"Yes," he answered, "I know I can,"

When he opened his eyes, however, his memory of the black was imperfect, and though able to read the large letters, he could not read the small ones. A second time he was told to close and cover his eyes, and again he saw a perfect black. When he opened them he was able to retain complete control of his memory, and so was able to read the whole card. This was ten minutes after he entered the office.

Diamond type was now given him to read, but the letters looked grey to him, and he could not distinguish them. Neither could he remember black when he was looking at them, because in order to see them grey he had to strain, and in order to remember black he would have had to relax, and he could not do both at the same time. He was told that the letters were perfectly black, and when he looked away from them he was able to remember them black. When he looked back he still remembered them black, and was able to read them with normal vision at twelve inches. This took five minutes, making the whole time in the office fifteen minutes. The cure was permanent, the patient not only retaining what he had gained, but continuing to improve his sight, by daily reading of fine print and the Snellen test card, till it became almost **telescopic**.

**September, 1919**

**1 -School Health News, published by the Department of Health of New York City, February, 1919.**

### BETTER EYESIGHT

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

October, 1919

### THE SWINGING CURE

If you see a letter perfectly, you may note that it appears to pulsate, or move slightly in various directions. If your sight is imperfect, the letter will appear to be stationary. The apparent movement is caused by the unconscious shifting of the eye. The lack of movement is due to the fact that the eye stares, or looks too long at one point. This is an invariable symptom of imperfect sight, and may often be relieved by the following method:

Close your eyes and cover them with the palms of the hands so as to exclude all the light, and shift mentally from one side of a black letter to the other. As you do this, the mental picture of the letter will appear to move back and forth in a direction contrary to the imagined movement of the eye. Just so long as you imagine that the letter is moving, or swinging, you will find that you are able to remember it, and the **shorter and more regular the swing, the blacker and more distinct the letter will appear**. If

you are able to imagine the letter stationary, which may be difficult, you will find that your memory of it will be much less perfect.

Now open your eyes and look first at one side and then at the other of the real letter. If it appears to move in a direction opposite to the movement of the eye, you will find that your vision has improved. If you can imagine the swing of the letter as well with your eyes open as with your eyes closed, as **short**, as **regular** and as **continuous**, your vision will be normal.

### SIMULTANEOUS RETINOSCOPY

Much of my information about the eye has been obtained by means of simultaneous retinoscopy.

The retinoscope is an instrument used to measure the refraction of the eye. It throws a beam of light into the pupil by reflection from a mirror, the light being either outside the instrument—above and behind the subject—or arranged within it by means of an electric battery. On looking through the sight-hole one sees a larger or smaller part of the pupil filled with light, which in normal human eyes is a reddish yellow, because this is the color of the retina, but which is green in a cat's eye, and might be white if the retina were diseased. Unless the eye is exactly focused at the point from which it is being observed one sees also a dark shadow at the edge of the pupil, and it is the behavior of this shadow when the mirror is moved in various directions which reveals the refractive condition of the eye. If the instrument is used at a distance of six feet or more, and the shadow moves in a direction opposite to the movement of the mirror, the eye is myopic. If it moves in the same direction as the mirror, the eye is either hypermetropic or normal; but in the case of hypermetropia the movement is more pronounced than in that of normality, and an expert can usually tell the difference between the two states merely by the nature of the movement. In astigmatism the movement is different in different meridians. To determine the degree of the error, or to distinguish accurately between hypermetropia and normality, or between the different kinds of astigmatism, it is usually necessary to place a glass before the eye of the subject.

This exceedingly useful instrument has possibilities which have not been generally realized by the medical profession. It is commonly employed only under certain artificial conditions in a dark room; but it is possible to use it under all sorts of normal and abnormal conditions on the eyes both of human beings and of the lower animals. I have used it in the daytime and at night; when the subjects were comfortable and when they were excited; when they were trying to see and when they were not; when they were lying and when they were telling the truth. I have also used it, under varying conditions, on the eyes of many cats, dogs, rabbits, birds, turtles, reptiles and fish.

Most ophthalmologists depend upon the Snellen test card, supplemented by trial lenses, to determine whether the vision is normal or not, and to determine the degree of any abnormality that may exist. This is a slow, awkward and unreliable method of testing the vision, and absolutely unavailable for the study of the refraction of the lower animals and that of human beings under the conditions of life. The test card can be used only under certain favorable conditions, but the retinoscope can be used anywhere. It is a little easier to use it in a dim light than in a bright one, but it may be used in any light, even with the strong light of the sun shining directly into the eye. It is available whether the subject is at rest or in motion, asleep or awake, or even under ether or chloroform. It is also available when the observer is in motion. It has been used successfully when the eyelids were partly closed, shutting off part of the area of the pupil; when the pupil was dilated; also when it was contracted to a pin-point; when the subject was reading fine print at six inches, or at a greater distance; and when the eye was oscillating from side to side, from above downward, or in other directions.

It takes a considerable time, varying from minutes to hours, to measure the refraction with the Snellen test card and trial lenses. With the retinoscope, however, the refraction can be determined in a fraction of a second. With the Snellen test card and trial lenses it would be impossible to get any information about the refraction of a baseball player at the moment he swings for the ball, at the moment he strikes it, and at the moment after he strikes it. With the retinoscope, however, it is quite easy to determine whether his vision is normal, or whether he is myopic, hypermetropic, or astigmatic, when he does these things; and if any errors of refraction are noted, one can guess their degree pretty accurately by the rapidity of the movement of the shadow.

With the Snellen test card and trial lenses conclusions must be drawn from the patient's statements as to what he sees; but the patient often becomes so worried and confused during the examination that he does not know what he sees, or whether different glasses make his sight better, or worse; and, moreover, visual acuity is not reliable evidence of the state of the refraction. One patient with two diopters of myopia may see twice as much as another with the same error of refraction. The evidence of the test card is, in fact, entirely subjective; that of the retinoscope is entirely objective, depending in no way upon the statements of the patient.

By means of simultaneous retinoscopy it has been demonstrated that the refraction of the eye is never constant; that all persons with errors of refraction have, at frequent intervals during the day and night, moments of normal vision when their myopia, hypermetropia, or astigmatism, disappears completely; and that all persons, no matter how good their sight may ordinarily be, have moments of imperfect sight when they become myopic, hypermetropic, or astigmatic. It has also been demonstrated that when the eye makes an effort to see, an error of refraction is always produced, and that when it looks at objects without effort, all errors of refraction disappear, no matter how great their degree, or how long their duration. It has been further demonstrated that when the eye strains to see distant objects myopia is always produced in one or all meridians, and when it strains to see near objects hypermetropia is always produced in one or all meridians.

The examination of the eyes of persons while asleep, or under the influence of ether or chloroform, has shown that the eye is rarely at rest during sleep, or while the subject is unconscious from any cause. Persons whose sight was normal while awake were found to have myopia, hypermetropia and astigmatism when asleep, and if these errors were present when they were awake, they were increased during sleep. This explains why so many people are unable to see as well in the morning as at other times, and why people waken with headaches and pain in the eyes. Under ether or chloroform, errors of refraction are also produced or increased, and when people are sleepy they have invariably been found to have errors of refraction.

Under conditions of mental or physical discomfort, such as pain, cough, fever, discomfort from heat or cold, depression, anger, or anxiety, errors of refraction are always produced in the normal eye, or increased in the eye in which they already exist. In a dim light, in a fog, or in the rain, the retinoscope may indicate no error of refraction in eyes which ordinarily have normal sight; but a pilot on a ship on a rainy night usually has an error of refraction, because he is straining to see, and it is rare to find persons in

positions of responsibility under unfavorable conditions with normal vision.

In order to obtain reliable results with the retinoscope it must be used at a distance of six feet or more from the subject. When used at a distance of three feet or less, as it commonly is, the subject becomes nervous and unconsciously strains, thus altering his refraction.

### FLOATING SPECKS

A very common phenomenon of imperfect sight is the one known to medical science as *muscae volitantes*, or *flying flies*. These floating specks are usually dark, or black; but sometimes appear like white bubbles, and in rare cases may assume all the colors of the rainbow. They move somewhat rapidly, usually in curving lines, before the eyes, and always appear to be just beyond the point of fixation. If one tries to look at them directly, they seem to move a little farther away. Hence their name of *flying flies*.

The literature of the subject is full of speculations as to the origin of these appearances. Some have attributed them to the presence of floating specks—dead cells or the debris of cells—in the vitreous humor, the transparent substance that fills four-fifths of the eyeball behind the crystalline lens. Similar specks on the surface of the cornea have also been held responsible for them. It has even been surmised that they might be caused by the passage of tears over the cornea. They are so common in myopia that they have been supposed to be one of the symptoms of this condition, although they occur also with other errors of refraction, as well as in eyes otherwise normal. They have been attributed to disturbances of the circulation, the digestion and the kidneys, and because so many insane people have them, have been thought to be an evidence of incipient insanity. The patent-medicine business has thrived upon them, and it would be difficult to estimate the amount of mental torture they have caused, as the following cases illustrate.

A clergyman who was much annoyed by the continual appearance of floating specks before his eyes was told by his eye specialist that they were a symptom of kidney disease, and that in many cases of kidney trouble, disease of the retina might be an early symptom. So at regular intervals he went to the specialist to have his eyes examined, and when at length the latter died, he looked around immediately for some one else to make the periodical examination. His family physician directed him to me. I was by no means so well known as his previous ophthalmological adviser, but it happened that I had taught the family physician how to use the ophthalmoscope after others had failed to do so. He thought, therefore, that I must know a lot about the use of the instrument, and what the clergyman particularly wanted was some one capable of making a thorough examination of the interior of his eyes, and detecting at once any signs of kidney disease that might make their appearance. So he came to me, and at least four times a year for ten years he continued to come.

Each time I made a very careful examination of his eyes, taking as much time over it as possible, so that he would believe that it was careful; and each time he went away happy because I could find nothing wrong. Once when I was out of town he got a cinder in his eye and went to another oculist to get it out. When I came back late at night I found him sitting on my doorstep, on the chance that I might return. His story was a pitiable one. The strange doctor had examined his eyes with the ophthalmoscope, and had suggested the possibility of glaucoma, describing the disease as a very treacherous one which might cause him to go suddenly blind and would be agonizingly painful. He emphasized what the patient had previously been told about the danger of kidney disease, suggested that the liver and heart might also be involved, and advised him to have all of these organs carefully examined. I made another examination of his eyes in general and their tension in particular; I had him feel his eyeballs and compare them with my own, so that he might see for himself that they were not becoming hard as a stone; and finally I succeeded in reassuring him. I have no doubt, however, that he went at once to his family physician for an examination of his internal organs.

A man returning from Europe was looking at some white clouds one day when floating specks appeared before his eyes. He consulted the ship's doctor, who told him that the symptom was very serious, and might be the forerunner of blindness. It might also indicate incipient insanity, as well as other nervous or organic diseases. He advised him to consult his family physician and an eye specialist as soon as he landed, which he did. This was twenty-five years ago, but I shall never forget the terrible state of nervousness and terror into which the patient had worked himself by the time he came to me. It was even worse than that of the clergyman, who was always ready to admit that his fears were unreasonable. I examined his eyes very carefully, and found them absolutely normal. The vision was perfect both for the near-point and the distance. The color perception, the fields and the tension were normal; and under a strong magnifying glass I could find no opacities in the vitreous. In short, there were absolutely no symptoms of any disease. I told the patient there was nothing wrong with his eyes, and I also showed him an advertisement of a quack medicine in a newspaper which gave a great deal of space to describing the dreadful things likely to follow the appearance of floating specks before the eyes, unless you began betimes (in good time, early) to take the medicine in question at one dollar a bottle. I pointed out that the advertisement, which was appearing in all the big newspapers of the city every day, and probably in other cities, must have cost a lot of money, and must, therefore, be bringing in a lot of money. Evidently there must be a great many people suffering from this symptom, and if it were as serious as was generally believed, there would be a great many more blind and insane people in the community than there were. The patient went away somewhat comforted, but at eleven o'clock—his first visit had been at nine—he was back again. He still saw the floating specks, and was still worried about them. I examined his eyes again as carefully as before, and again was able to assure him that there was nothing wrong with them. In the afternoon I was not in my office, but I was told that he was there at three and at five. At seven he came again, bringing with him his family physician, an old friend of mine. I said to the latter:

"Please make this patient stay at home. I have to charge him for his visits, because he is taking up so much of my time; but it is a shame to take his money when there is nothing wrong with him."

What my friend said to him I don't know, but he did not come back again.

I did not know as much about *muscae volitantes* then as I know now, or I might have saved both of these patients a great deal of uneasiness. I could tell them that their eyes were normal, but I did not know how to relieve them of the symptom, which is simply **an illusion resulting from mental strain**. The specks are associated to a considerable extent with markedly **imperfect eyesight**, because persons whose eyesight is imperfect always strain to see; but persons whose eyesight is ordinarily normal may see them at times, because no eye has normal sight all the time. Most people can see *muscae volitantes* when they look at the sun, or any uniformly bright surface, like a sheet of white paper upon which the sun is shining. This is because most people strain when

they look at surfaces of this kind. The specks are never seen, in short, except when the eyes and mind are under a strain, and they always disappear when the strain is relieved. **If one can remember a small letter on the Snellen test card by central fixation, the specks will immediately disappear, or cease to move; but if one tries to remember two or more letters equally well at one time, they will reappear and move.**

Usually the strain that causes muscae volitantes is very easily relieved. See; April, 1925  
Floating specks may be debris in the eyeball. A cleansing diet, improved circulation of blood, fluid to/in the eye can break down floaters and enable them to flow out of the eye. Eyestrain, mental strain, staring, poor diet, sugar, can cause floaters. Shifting, central fixation, relaxation can stop the appearance of floaters.

#### CORRESPONDENCE TREATMENT

Correspondence treatment is usually regarded as quackery, and it would be manifestly impossible to treat many diseases in this way. Pneumonia and typhoid, for instance, could not possibly be treated by correspondence, even if the physician had a sure cure for these conditions and the mails were not too slow for the purpose. In the case of most diseases, in fact, there are serious objections to correspondence treatment.

But myopia, hypermetropia and astigmatism are functional conditions, not organic, as the text-books teach, and as I believed myself until I learned better. Their treatment by correspondence, therefore, has not the drawbacks that exist in the case of most physical derangements. One cannot, it is true, fit glasses by correspondence as well as when the patient is in the office, but even this can be done, as the following case illustrates.

An old colored woman in the wilds of Honduras, far removed from any physician or optician, was unable to read her Bible, and her son, a waiter in New York, asked me if I could not do something for her. The suggestion gave me a distinct shock which I will remember as long as I live. I had never dreamed of the possibility of prescribing glasses for anyone I had not seen, and I had, besides, some very disquieting recollections of colored women whom I had tried to fit with glasses at my clinic. If I had so much difficulty in prescribing the proper glasses under favorable conditions, how could I be expected to fit a patient whom I could not even see? The waiter was deferentially persistent, however. He had more faith in my genius than I had, and as his mother was nearing the end of her life, he was very anxious to gratify her last wishes. So, like the unjust judge of the parable, I yielded at last to his importunity, and wrote a prescription for convex 3.00 D. S. The young man ordered the glasses and mailed them to his mother, and by return mail came a very grateful letter stating that they were perfectly satisfactory.

A little later the patient wrote that she couldn't see objects at the distance that were perfectly plain to other people, and asked if some glasses couldn't be sent that would make her see at the distance as well as she did at the near-point. This seemed a more difficult proposition than the first one; but again the son was persistent, and I myself could not get the old lady out of my mind. So again I decided to do what I could. The waiter had told me that his mother had read her Bible long after the age of forty. Therefore I knew she could not have much hypermetropia, and was probably slightly myopic. I knew also that she could not have much astigmatism, for in that case her sight would always have been noticeably imperfect. Accordingly I told her son to ask her to measure very accurately the distance between her eyes and the point at which she could read her Bible best with her glasses, and to send me the figures. In due time I received, not figures, but a piece of string about a quarter of an inch in diameter and exactly ten inches long. If the patient's vision had been normal for the distance, I knew that she would have been able to read her Bible best with her glasses at thirteen inches. The string showed that at ten inches she had a refraction of four diopters. Subtracting from this the three diopters of her reading glasses, I got one diopter of myopia. I accordingly wrote a prescription for concave 1.00 D. S., and the glasses were ordered and mailed to Honduras. The acknowledgment was even more grateful than in the case of the first pair. The patient said that for the first time in her life she was able to read signs and see other objects at a distance as well as other people did, and that the whole world looked entirely different to her.

Would anyone venture to say that it was unethical for me to try to help this patient? Would it have been better to leave her in her isolation without even the consolation of Bible reading? I do not think so. What I did for her required only an ordinary knowledge of physiological optics, and if I had failed, I could not have done her much harm.

In the case of the treatment of imperfect sight without glasses there can be even less objection to the correspondence method. It is true that in most cases progress is more rapid and the results more certain when the patient can be seen personally; but often this is impossible, and I see no reason why patients who can not have the benefit of personal treatment should be denied such aid as can be given them by correspondence. I have been treating patients in this way for years, and often with extraordinary success.

Some years ago an English gentleman wrote to me that his glasses were very unsatisfactory. They not only did not give him good sight, but they increased instead of lessening his discomfort. He asked if I could help him, and since relaxation always relieves discomfort and improves the vision, I did not believe that I was doing him an injury in telling him how to rest his eyes. He followed my directions with such good results that in a short time he obtained perfect sight for both the distance and the near-point without glasses, and was completely relieved of his pain. Five years later he wrote me that he had qualified as a sharpshooter in the army. Did I do wrong in treating him by correspondence? I do not think so.

After the United States entered the European war, an officer wrote to me from the deserts of Arizona that the use of his eyes at the near-point caused him great discomfort, which glasses did not relieve, and that the strain had produced granulation of the lids. As it was impossible for him to come to New York, I undertook to treat him by correspondence. He improved very rapidly. The inflammation of the lids was relieved almost immediately, and in about four months he wrote me that he had read one of my own reprints-by no means a short one-in a dim light, with no bad after effects; that the glare of the Arizona sun, with the Government thermometer registering 114, did not annoy him, and that he could read the ten line on the test card at fifteen feet almost perfectly, while even at twenty feet he was able to make out most of the letters.

A third case was that of a forester in the employ of the U. S. Government. He had myopic astigmatism, and suffered extreme discomfort, which was not relieved either by glasses or by long summers in the mountains, where he used his eyes but little for close work. He was unable to come to New York for treatment, and although I told him that correspondence treatment was somewhat uncertain, he said he was willing to risk it. It took three days for his letters to reach me and another three for my reply

to reach him, and as letters were not always written promptly on either side, he often did not hear from me more than once in three weeks. Progress under these conditions was necessarily slow; but his discomfort was relieved very quickly, and in about ten months his sight had improved from 20/50 to 20/20.

In almost every case the treatment of cases coming from a distance is continued by correspondence after they return to their homes; and although the patients do not get on so well as when they are coming to the office, they usually continue to make progress till they are cured.

At the same time it is often very difficult to make patients understand what they should do when one has to communicate with them entirely by writing, and probably all would get on better if they could have some personal treatment. At the present time the number of doctors in different parts of the United States who understand the treatment of imperfect sight without glasses is altogether too few, and my efforts to interest them in the matter have not been very successful. I would consider it a privilege to treat medical men without a fee, and when cured they will be able to assist me in the treatment of patients in their various localities.

## **BETTER EYESIGHT**

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

**November, 1919**

## **THE MEMORY CURE**

When the sight is perfect, the memory is also perfect, because the mind is perfectly relaxed. Therefore the sight may be improved by any method that improves the memory. The easiest thing to remember is a small black spot of no particular size and form; but when the sight is imperfect it will be found impossible to remember it with the eyes open and looking at letters, or other objects with definite outlines. It may, however, be remembered for a few seconds or longer, when the eyes are closed and covered, or when looking at a blank surface where there is nothing particular to see. By cultivating the memory under these favorable conditions, it gradually becomes possible to retain it under unfavorable ones, that is, when the eyes are open and the mind conscious of the impressions of sight. By alternately remembering the period with the eyes closed and covered and then looking at the Snellen test card, or other letters or objects; or by remembering it when looking away from the card where there is nothing particular to see, and then looking back; the patient becomes able, in a longer or shorter time, to retain the memory when looking at the card, and thus becomes able to read the letters with normal vision. Many children have been cured very quickly by this method. Adults who have worn glasses have greater difficulty. Even under favorable conditions, the period cannot be remembered for more than a few seconds, unless one shifts from one part of it to another. One can also shift from one period, or other small black object, to another.

## **REASON AND AUTHORITY**

**This article describes how eye doctors fought against Dr. Bates, tried to hide the Bates Method from the public so they could continue selling eyeglasses, surgery, drugs.**

Some one—perhaps it was Bacon—has said: "You cannot by reasoning correct a man of ill opinion which by reasoning, he never acquired." He might have gone a step farther and stated that neither by reasoning, nor by actual demonstration of the facts, can you convince some people that an opinion which they have accepted on authority is wrong. A man whose name I do not care to mention, a professor of ophthalmology, and a writer of books well known in this country and in Europe, saw me perform an experiment upon the eye of a rabbit which, according to others who had witnessed it, demonstrated beyond any possibility of error that the lens is not a factor in accommodation. At each step of the operation he testified to the facts; yet at the conclusion he preferred to discredit the evidence of his senses rather than accept the only conclusion that these facts admitted.

First he examined the eye of the animal to be experimented upon with the retinoscope and found it normal, and the fact was written down. Then the eye was stimulated with electricity, and he testified that it accommodated. This was also written down. I now divided the superior oblique muscle, and the eye was again stimulated with electricity. The doctor observed the eye with the retinoscope when this was being done and said, "You failed to produce accommodation." This fact, too, was written down. The doctor now used the electrode himself, but again failed to observe accommodation, and these facts were written down. I now sewed the cut ends of the muscle together, and once more stimulated the eye with electricity. The doctor said, "Now you have succeeded in producing accommodation," and this was written down. I now asked:

"Do you think that superior oblique had anything to do with producing accommodation?"

"Certainly not," he replied.

"Why?" I asked.

"Well," he said, "I have only the testimony of the retinoscope. I am getting on in years, and I don't feel that confidence in my ability to use the retinoscope that I once had. I would rather you wouldn't quote me on this."

While the operation was in progress, however, he gave no indication whatever of doubting his ability to use the retinoscope. He was very positive, in fact, that I had failed to produce accommodation after the cutting of the oblique muscle and his tone suggested that he considered the failure ignominious. It was only after he found himself in a logical trap, with no way out except by discrediting his own observations, that he appeared to have any doubts as to their value.

Patients whom I have cured of various errors of refraction have frequently returned to specialists who had prescribed glasses for them, and, by reading fine print and the Snellen test card with normal vision, have demonstrated the fact that they were cured, without in any way shaking the faith of these practitioners in the doctrine that such cures are impossible. A girl of sixteen who had progressive myopia of such high degree that she was not allowed to read, and was unable to go about on the streets without a guide, was assured by the specialist whom her family consulted that her condition was quite hopeless, and that it was likely to

progress until it ended in blindness. She was cured in a very short time by means of the methods advocated in this magazine, becoming able to discard her glasses and resume all the ordinary activities of life. She then returned to the specialist who had condemned her to blindness to tell him the good news; but, while he was unable to deny the fact that her vision was normal without glasses, he said it was impossible that she would have been cured of myopia, because myopia was incurable. How he reconciled this statement with his former patient's condition he was unable to make clear to her.

A lady with compound myopic astigmatism<sup>1</sup> suffered from almost constant headaches which were very much worse when she took her glasses off. Every week, no matter what she did, she was so prostrated by eyestrain that she had to spend a few days in bed; and if she went to a theatre, or to a social function, she had to stay there longer. She was told to take off her glasses and go to the movies: to look first at the corner of the screen, then off to the dark, then back to the screen a little nearer to the center, and so forth. She did so, and soon became able to look directly at the pictures without discomfort. After that nothing troubled her. One day she called on her former ophthalmological adviser, in the company of a friend who wanted to have her glasses changed, and told him of her cure. The facts seemed to make no impression on him whatever. He only laughed and said, "I guess Dr. Bates is more popular with you than I am."

In some cases patients themselves, after they are cured, allow themselves to be convinced that it was impossible that such a thing could have happened, and go back to their glasses. A clergyman and writer, aged forty-seven, who had worn glasses for years for distance and reading, had what I should have considered the good fortune to be very quickly cured. By the aid of his imagination he was able to relax in less than five minutes, and to stay relaxed. When he looked at fine print it appeared grey to him, and he could not read it. I asked him if he had ever seen printer's ink. He replied, of course, that he had. I then told him that the paragraph of printed matter which he held in his hand was printed in printer's ink, and that it was black and not grey. I asked him if he did not know and believe that it was black, or if he could not at least imagine that it was black. "Yes," he said, "I can do that"; and immediately he read the print. It took him only about a minute to do this, and he was not more than five minutes in the office. The cure was permanent, and he was very grateful for a time. Then he began to talk to eye specialists whom he knew, and thereupon grew skeptical as to the value of what I had done for him. One day I met him at the home of a mutual friend, and in the presence of a number of other people he accused me of having hypnotized him, adding that to hypnotize a patient without his knowledge or consent was to do him a grievous wrong. Some of the listeners protested that whether I had hypnotized him or not, I had not only done him no harm, but had greatly benefited him, and he ought to forgive me. He was unable, however, to take this view of the matter. Later he called on a prominent eye specialist who told him that the presbyopia (old sight) and astigmatism from which he had suffered were incurable, and that if he persisted in going without his glasses he might do himself great harm. The fact that his sight was perfect for the distance and the near-point had no effect upon the specialist and the patient allowed himself to be frightened into disregarding it also. He went back to his glasses, and so far as I know has been wearing them ever since. The story obtained wide publicity, for the man had a large circle of friends and acquaintances; and if I had destroyed his sight I could scarcely have suffered more than I did for curing him.

[Other Doctors try to hide Dr. Bates discoveries from the public. Doctors expel Dr. Bates from the Hospital he worked at after Dr. Bates cures patients without glasses, surgery, drugs and proves the facts of Natural Vision Improvement.](#)

Fifteen or twenty years ago the specialist mentioned in the foregoing story read a paper on cataract at a meeting of the ophthalmological section of the American Medical Association in Atlantic City, and asserted that anyone who said that cataract could be cured without the knife was a quack. At that time I was assistant surgeon at the New York Eye and Ear Infirmary, and it happened that I had been collecting statistics of the spontaneous cure of cataract at the request of the executive surgeon of this institution, Dr. Henry G. Noyes, Professor of Ophthalmology at the Bellevue Hospital Medical School. As a result of my inquiry I had secured records of a large number of cases which had recovered, not only without the knife, but without any treatment at all. I also had records of cases which I had sent to Dr. James E. Kelly of New York and which he had cured, largely by hygienic methods. Dr. Kelly is not a quack, and at that time was Professor of Anatomy in the New York Post Graduate Medical School and Hospital and attending surgeon to a large city hospital. In the five minutes allotted to those who wished to discuss the paper, I was able to tell the audience enough about these cases to make them want to hear more. My time was, therefore, extended, first to half an hour and then to an hour. Later both Dr. Kelly and myself received many letters from men in different parts of the country who had tried his treatment with success. The man who wrote the paper had blundered, but he did not lose any prestige because of my attack with facts upon his theories. He is still a prominent and honored ophthalmologist and in his latest book he gives no hint of having ever heard of any successful method of treating cataract other than by operation. He was not convinced by my record of spontaneous cures, nor by Dr. Kelly's record of cures by treatment; and while a few men were sufficiently impressed to try the treatment recommended, and while they obtained satisfactory results, the facts made no impression upon the profession as a whole, and did not modify the teaching of the schools. That spontaneous cures of cataract do sometimes occur cannot be denied; but they are supposed to be very rare, and any one who suggests that the condition can be cured by treatment still exposes himself to the suspicion of being a quack.

Between 1886 and 1891 I was a lecturer at the Post Graduate Hospital and Medical School. The head of the institution was Dr. D. B. St. John Roosa. He was the author of many books, and was honored and respected by the whole medical profession. At the school they had got the habit of putting glasses on the nearsighted doctors, and I had got the habit of curing them without glasses. It was naturally annoying to a man who had put glasses on a student to have him appear at a lecture without them and say that Dr. Bates had cured him. Dr. Roosa found it particularly annoying, and the trouble reached a climax one evening at the annual banquet of the faculty when, in the presence of one hundred and fifty doctors, he suddenly poured out the vials of his wrath upon my head. He said that I was injuring the reputation of the Post Graduate by claiming to cure myopia. Every one knew that Donders said it was incurable, and I had no right to claim that I knew more than Donders. I reminded him that some of the men I had cured had been fitted with glasses by himself. He replied that if he had said they had myopia he had made a mistake. I suggested further investigation. "Fit some more doctors with glasses for myopia," I said, "and I will cure them. It is easy for you to examine them afterwards and see if the cure is genuine." This method did not appeal to him, however. He repeated that it was impossible to cure myopia, and to prove that it was impossible **he expelled me from the Post Graduate, even the privilege of resignation being denied to me.** The fact is that, except in rare cases, man is not a reasoning being. He is dominated by authority, and when the facts are not in accord with the view imposed by authority, so much the worse for the facts. They may and indeed must win in

the long run; but in the meantime the world gropes needlessly in darkness and endures much suffering that might have been avoided.

### THE EFFECT OF LIGHT UPON THE EYES

Although the eyes were made to react to the light, a very general fear of the effect of this element upon the organs of vision is entertained both by the medical profession and by the laity. Extraordinary precautions are taken in our homes, offices and schools to temper the light, whether natural or artificial, and to insure that it shall not shine directly into the eyes; smoked and amber glasses, eye-shades, broad-brimmed hats and parasols are commonly used to protect the organs of vision from what is considered an excess of light; and when actual disease is present, it is no uncommon thing for patients to be kept for weeks, months and years in dark rooms, or with bandages over their eyes.

The evidence on which this universal fear of the light has been based is of the slightest. In the voluminous literature of the subject one finds such a lack of information that, in 1910, Dr. J. Herbert Parsons of the Royal Ophthalmic Hospital of London, addressing a meeting of the Ophthalmological Section of the American Medical Association, felt justified in saying that ophthalmologists, if they were honest with themselves, "must confess to a lamentable ignorance of the conditions which render bright light injurious to the eyes."<sup>2</sup> Since then, Verhoeff and Bell have reported<sup>3</sup> an exhaustive series of experiments carried on at the Pathological Laboratory of the Massachusetts Charitable Eye and Ear Infirmary, which indicate that the danger of injury to the eye from light radiation as such has been "very greatly exaggerated." That brilliant sources of light sometimes produce unpleasant temporary symptoms cannot, of course, be denied; but as regards definite pathological effects, or permanent impairment of vision from exposure to light alone, Drs. Verhoeff and Bell were unable to find, either clinically or experimentally, anything of a positive nature.

The results of these experiments are in complete accord with my own observations as to the effect of strong light upon the eyes. In my experience such light has never been permanently injurious. Persons with normal sight have been able to look at the sun for an indefinite length of time, even an hour or longer, without any discomfort or loss of vision. Immediately afterward they were able to read the Snellen test card with improved vision, their sight having become better than what is ordinarily considered normal. Some persons with normal sight do suffer discomfort and loss of vision when they look at the sun; but in such cases the retinoscope always indicates an error of refraction, showing that this condition is due, not to the light, but to strain. In exceptional cases persons with defective sight have been able to look at the sun, or have thought that they have looked at it, without discomfort and without loss of vision; but, as a rule, the strain in such eyes is enormously increased and the vision decidedly lowered by sun-gazing, as manifested by inability to read the Snellen test card. **Blind areas (scotomata)** may develop in various parts of the field—two or three or more. The sun, instead of appearing perfectly white, may appear to be slate-colored, yellow, red, blue, or even totally black. After looking away from the sun, patches of color of various kinds and sizes may be seen, continuing a variable length of time, from a few seconds to a few minutes, hours, or even months. In fact, one patient was troubled in this way for a year or more after looking at the sun for a few seconds. Even total blindness lasting a few hours has been produced. Organic changes may also be produced. Inflammation, redness of the conjunctiva, cloudiness of the lens and of the aqueous and vitreous humours, congestion and cloudiness of the retina, optic nerve and choroid, have all resulted from **sun-gazing**. These effects, however, are **always temporary**. The scotomata, the strange colors, even the total blindness, as explained in the preceding chapter, are only mental illusions. No matter how much the sight may have been impaired by **sun-gazing**, or how long the impairment may have lasted, a return to normal has always occurred; while prompt relief of all the symptoms mentioned has always followed the relief of eyestrain, showing that the conditions are the result, not of the light, but of the strain. **Some persons who have believed their eyes to have been permanently injured by the sun have been promptly cured by central fixation, indicating that their blindness had been simply functional.**

By persistence in looking at the sun, a person with normal sight soon becomes able to do so without any loss of vision; but persons with imperfect sight usually find it impossible to accustom themselves to such a strong light until their vision has been improved by other means. **One has to be very careful in recommending sun-gazing to persons with imperfect sight; because, although no permanent harm can result from it, great temporary discomfort may be produced, with no permanent benefit. In some rare cases, however, complete cures have been effected by this means alone.** [Diet must also be healthy. No prescription, non-prescription drugs, including sinus sprays, cough/cold medicines...](#)

In one of these cases the sensitiveness of the patient, even to ordinary daylight, was so great that an eminent specialist had felt justified in putting a black bandage over one eye and covering the other with a smoked glass so dark as to be nearly opaque. She was kept in this condition of almost total blindness for two years without any improvement. Other treatment extending over some months also failed to produce satisfactory results. She was then advised to look directly at the sun. The immediate result was total blindness, which lasted several hours; but next day the vision was not only restored to its former condition, but was improved. The sun-gazing was repeated, and each time the blindness lasted for a shorter period. At the end of a week the patient was able to look directly at the sun without discomfort, and her vision, which had been 20/200 without glasses and 20/70 with them, had improved to 20/10, twice the accepted standard for normal vision.

Like the sun, a strong electric light may also lower the vision temporarily, but never does any permanent harm. In those exceptional cases in which the patient can become accustomed to the light, it is beneficial. After looking at a strong electric light some patients have been able to read the Snellen test card better.

It is not light but darkness that is dangerous to the eye. Prolonged exclusion from the light always lowers the vision, and may produce serious inflammatory conditions. Among young children living in tenements this is a somewhat frequent cause of ulcers upon the cornea, which ultimately destroy the sight. The children, finding their eyes sensitive to light, bury them in the pillows and thus shut out the light entirely. **The universal fear of reading or doing fine work in a dim light is, however, unfounded. So long as the light is sufficient so that one can see without discomfort, this practice is not only harmless, but may be beneficial.**

Sudden contrasts of light are supposed to be particularly harmful to the eye. The theory on which this idea is based is summed

up as follows by Fletcher B. Dresslar, specialist in school-hygiene and sanitation of the United States Bureau of Education:

"The muscles of the iris are automatic in their movements, but rather slow. Sudden strong light and weak illumination are painful and likewise harmful to the retina. For example, if the eye adjusted to a dim light is suddenly turned toward a brilliantly lighted object, the retina will receive too much light, and will be shocked before the muscles controlling the iris can react to shut out the superabundance of light. If contrasts are not strong, but are frequently made, that is, if the eye is called upon to function where frequent adjustments in this way are necessary, the muscles controlling the iris become fatigued, respond more slowly and less perfectly. As a result, eyestrain in the ciliary muscles is produced and the retina is over stimulated. This is one cause of headaches and tired eyes."<sup>4</sup> There is no evidence whatever to support these statements. Sudden fluctuations of light undoubtedly cause discomfort to many persons, but far from being injurious, I have found them, in all cases observed, to be actually beneficial. The pupil of the normal eye, when it has normal sight, does not change appreciably under the influence of changes of illumination; and persons with normal vision are not inconvenienced by such changes. I have seen a patient look directly at the sun after coming from an imperfectly lighted room, and then, returning to the room, immediately pick up a newspaper and read it. When the eye has imperfect sight, the pupil usually contracts in the light and expands in the dark, but it has been observed to contract to the size of a pinhole in the dark. Whether the contraction takes place under the influence of light or of darkness, the cause is the same, namely, strain. Persons with imperfect sight suffer great inconvenience, resulting in lowered vision, from changes in the intensity of the light; but the lowered vision is always temporary, and if the eye is persistently exposed to these conditions, the sight is benefited. Such practices as reading alternately in a bright and a dim light, or going from a dark room to a well-lighted one, and vice versa, are to be recommended. Even such rapid and violent fluctuations of light as those involved in the production of the moving picture are, in the long run, beneficial to all eyes. I always advise patients under treatment for the cure of defective vision to go to the movies frequently and practice central fixation. They soon become accustomed to the flickering light, and afterward other lights and reflections cause less annoyance.

**In later years Dr. Bates advises closed eyes sunning.**

#### **TWO POINTS OF VIEW**

Being anxious to know what my colleagues think of BETTER EYESIGHT, I lately sent notes to a number of them asking for their opinion. The following replies were so interesting that I think the readers of the magazine have a right to see them.

Dear Doctor:

As long as you ask for my opinion of your new magazine entitled BETTER EYESIGHT, permit me to give it to you in all frankness. It is what we call in the vernacular, "PUNK."

Meaning no personal offense, I am,  
Your colleague.

Dear Doctor

Your little note received this morning and am glad to have the opportunity to tell you what I think of BETTER EYESIGHT.

It is all that you claim for it, and I am always glad to receive it, as I know that I am going to get something beneficial for myself as well as something for the good of my patients.

If the medical bigots had BETTER EYESIGHT on their desks, and would put into practice what you give in each number, it would be a great blessing to the people who are putting eye crutches on their eyes. I first tried central fixation on myself and had marvelous results. I threw away my glasses and can now see better than I have ever done. I read very fine type (smaller than newspaper type) at a distance of six inches from the eyes, and can run it out at full arm's length and still read it without blurring the type.

I have instructed some of my patients in your methods, and all are getting results. One case who has a partial cataract of the left eye could not see anything on the Snellen test card at twenty feet, and could see the letters only faintly at ten feet. Now she can read 20/10 with both eyes together and also with each eye separately, but the left eye seems, as she says, to be looking through a little fog. I could cite many other cases that have been benefited by central fixation, but this one is the most interesting to me.

Kindly send me more of the subscription slips, as I want to hand them out to my patients.

Yours very truly,

#### **November, 1919**

1 - A condition in which the eye is shortsighted in all meridians, but more so in one than in the others.

2 - Jour. Am. Med. Assn., Dec. 10, 1910, p. 2028.

3 - Proc. Am. Acad. Arts and Sciences, July, 1916, vol. 51, No. 13.

4 - School Hygiene, Brief Course Series in Education, edited by Paul Monroe, Ph.D., 1916, pp. 235-236.



## BETTER EYESIGHT

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

December, 1919

#### THE IMAGINATION CURE

When the imagination is perfect the mind is always perfectly relaxed, and as it is impossible to relax and imagine a letter perfectly, and at the same time strain and see it imperfectly, it follows that when one imagines that one sees a letter perfectly one actually does see it, as demonstrated by the retinoscope, no matter how great an error of refraction the eye may previously have had. The sight, therefore, may often be improved very quickly by the aid of the imagination. To use this method the patient may proceed as follows:

Look at a letter at the distance at which it is seen best. Close and cover the eyes so as to exclude all the light, and remember it. Do this alternately until the memory is nearly equal to the sight. Next, after remembering the letter with the eyes closed and covered, and while still holding the mental picture of it, look at a blank surface a foot or more to the side of it, at the distance at which you wish to see it. Again close and cover the eyes and remember the letter, and on opening them look a little nearer to it. Gradually reduce the distance between the point of fixation and the letter, until able to look directly at it and imagine it as well as it is remembered with the eyes closed and covered. The letter will then be seen perfectly, and other letters in its neighborhood will come out. **If unable to remember the whole letter, you may be able to imagine a black period as forming part of it. If you can do this, the letter will also be seen perfectly.**

Imagine the letter is composed of many black periods and shift from period to period (part to part) on the letter.

#### THE MENACE OF LARGE PRINT

If you look at the big "C" on the Snellen test card (or any other large letter of the same size) at ten, fifteen, or twenty feet, and try to see it all alike, you may note a feeling of strain and the letter may not appear perfectly black and distinct. If you now look at only one part of the letter, and see the rest of it worse, you will note that the part seen best appears blacker than the whole letter when seen all alike, and you may also note a relief of strain. If you look at the small "c" on the bottom line of the test card, you may be able to note that it seems blacker than the big "C." If not, imagine it as forming part of the area of the big "C." If you are able to see this part blacker than the rest of the letter, the imagined letter will, of course, appear blacker also. If your sight is normal, you may now go a step further and note that when you look at one part of the small "c" this part looks blacker than the whole letter, and that it is easier to see the letter in this way than to see it all alike.

If you look at a line of the smaller letters that you can read readily, and try to see them all alike—all equally black and equally distinct in outline—you will probably find it to be impossible, and the effort will produce discomfort and, perhaps, pain. You may, however, succeed in seeing two or more of them alike. This, too, may cause much discomfort, and if continued long enough, will produce pain. If you now look at only the first letter of the line, seeing the adjoining ones worse, the strain will at once be relieved, and the letter will appear blacker and more distinct than when it was seen equally well with the others.

If your sight is normal at the near-point, you can repeat these experiments with a letter seen at this point, with the same results. A number of letters seen equally well at one time will appear less black and less distinct than a single letter seen best, and a large letter will seem less black and distinct than a small one; while in the case of both the large letter and the several letters seen all alike, a feeling of strain may be produced in the eye. You may also be able to note that the reading of very fine print, when it can be done perfectly, is markedly restful to the eye.

The smaller the point of maximum vision, in short, the better the sight, and the less the strain upon the eye. This fact can usually be demonstrated in a few minutes by any one whose sight is not markedly imperfect; and in view of some of our educational methods, is very interesting and instructive.

Probably every man who has written a book upon the eye for the last hundred years has issued a warning against fine print in school books, and recommended particularly large print for small children. This advice has been followed so assiduously that one could probably not find a lesson book for small children anywhere printed in ordinary reading type, while alphabets are often printed in characters one and two inches high. The British Association for the Advancement of Science does not wish to see children read books at all before they are seven years old, and would conduct their education previous to that age by means of large printed wall-sheets, blackboards, pictures, and oral teaching. If they must read, however, it wants them to have 24- and 30-point type, with capitals about a quarter of an inch in height. This is carefully graded down, a size smaller each year, until at the age of twelve the children are permitted to have the same kind of type as their elders. Bijou editions of Bible, prayer-book and hymnals are forbidden, however, to children of all ages.<sup>1</sup>

In the London myope classes, which have become the model for many others of the same kind, books are eliminated entirely, and only the older children are allowed to print their lessons in one- and two-inch types.<sup>2</sup>

Yet it has just been shown that large print is a strain upon the eyes, while the retinoscope demonstrates that a strain to see at the near-point always produces hypermetropia<sup>3</sup> (commonly but erroneously called "farsight"). We should naturally expect, therefore, to find hypermetropia very common among small children, and it is. Of children eight and a half years old in the public schools of Philadelphia, Risley<sup>4</sup> found that more than eighty-eight per cent were hypermetropic, and similar figures may be found in all statistics of the subject. The percentage declines as the children become older, but hypermetropia, or hypermetropic astigmatism, remains at all ages the most common of all errors of refraction. Hypermetropia is, in fact, a much more serious problem than myopia, or nearsight. Yet we have heard very little about it, for the specialists have concluded, from its prevalence and its tendency to pass away or become less pronounced with the growth of the body, that it is the normal state of the immature human eye and therefore beyond the reach of preventive measures. It is true that many young children are not hypermetropic, but

this fact is easily disposed of by the theory that the ciliary muscle alters the shape of the lens in such cases sufficiently to compensate for the shortness of the eyeball.

The baselessness of this theory, as well as the relation of large print to the production of hypermetropia, may be demonstrated by the fact that the condition can be relieved, and has been relieved in numerous cases, by the reading of fine print, combined with rest of the eyes. A child of eight was cured in a few visits by this means. Yet according to the British Association she should not, at this age, have been allowed to read any type larger than 12-point, with capitals more than an eighth of an inch in height. Many grown people have been cured of hypermetropia in the same way, and in all forms of functional imperfect sight the reading of fine print, when it can be done with comfort, has been found to be a benefit to the eyes. Even straining to see fine print is sometimes a benefit in myopia. [Large letters are not a strain if central fixation, shifting are applied. Avoid diffusion, eccentric fixation.](#)

## SHIFTING AND SWINGING

### Correct Appearance of Oppositional Movement

When the eye with normal vision regards a letter either at the near-point or at the distance, the letter may appear to pulsate, or move in various directions, from side to side, up and down, or obliquely. When it looks from one letter to another on the Snellen test card, or from one side of a letter to another, not only the letters, but the whole line of letters and the whole card, may appear to move from side to side. This apparent movement is due to the shifting of the eye, and is always in a direction contrary to its movement. If one looks at the top of a letter, the letter is below the line of vision, and therefore appears to move downward. If one looks at the bottom, the letter is above the line of vision and appears to move upward. If one looks to the left of the letter, it is to the right of the line of vision and appears to move to the right. If one looks to the right, it is to the left of the line of vision and appears to move to the left.

Persons with normal vision are rarely conscious of this illusion, and may have difficulty in demonstrating it; but in every case that has come under my observation they have always become able, in a longer or shorter time, to do so. When the sight is imperfect the letters may remain stationary, or even move in the same direction as the eye.

It is impossible for the eye to fix a point longer than a fraction of a second. If it tries to do so, it begins to strain and the vision is lowered. This can readily be demonstrated by trying to hold one part of a letter for an appreciable length of time. No matter how good the sight, it will begin to blur, or even disappear, very quickly, and sometimes the effort to hold it will produce pain. In the case of a few exceptional people a point may appear to be held for a considerable length of time; the subjects themselves may think that they are holding it; but this is only because the eye shifts unconsciously, the movements being so rapid that objects seem to be seen all alike simultaneously.

The shifting of the eye with normal vision is usually not conspicuous, but by direct examination with the ophthalmoscope<sup>5</sup> it can always be demonstrated. If one eye is examined with this instrument while the other is regarding a small area straight ahead, the eye being examined, which follows the movements of the other, is seen to move in various directions, from side to side, up and down, in an orbit which is usually variable. If the vision is normal, these movements are extremely rapid and unaccompanied by any appearance of effort. The shifting of the eye with imperfect sight, on the contrary, is slower, its excursions are wider, and the movements are jerky and made with apparent effort.

It can also be demonstrated that the **eye is capable of shifting with a rapidity which the ophthalmoscope cannot measure.** ([Saccadic movements](#)) The normal eye can read fourteen letters on the bottom line of a Snellen test card, at a distance of ten or fifteen feet, in a dim light, so rapidly that they seem to be seen all at once. Yet it can be demonstrated that in order to recognize the letters under these conditions it is necessary to make about four shifts to each letter. At the near-point, even though one part of the letter is seen best, the rest may be seen well enough to be recognized; but at the distance it is impossible to recognize the letters unless one shifts from the top to the bottom and from side to side. One must also shift from one letter to another, making about **seventy shifts in a fraction of a second.**

A line of small letters on the Snellen test card may be less than a foot long by a quarter of an inch in height; and if it requires seventy shifts to a fraction of a second to see it apparently all at once, it must require many thousands to see an area of the size of the screen of a moving picture with all its detail of people, animals, houses, or trees, while to see sixteen such areas to a second, as is done in viewing moving pictures, must require a rapidity of shifting that can scarcely be realized. Yet it is admitted that the present rate of taking and projecting moving pictures is too slow. The results would be more satisfactory, authorities say, if the rate were raised to twenty, twenty-two or twenty-four a second. The human eye and mind are not only capable of this rapidity of action, and that without effort or strain, but it is only when the eye is able to shift thus rapidly that eye and mind are at rest, and the efficiency of both at their maximum. It is true that every motion of the eye produces an error of refraction; but when the movement is short, this is very slight, and usually the shifts are so rapid that the error does not last long enough to be detected by the retinoscope, its existence being demonstrable only by reducing the rapidity of the movements to less than four or five a second. The period during which the eye is at rest is much longer than that during which an error of refraction is produced. Hence, when the eye shifts normally no error of refraction is manifest. The more rapid the unconscious shifting of the eye, the better the vision; but if one tries to be conscious of a too rapid shift, a strain will be produced.

Perfect sight is impossible without continual shifting, and such shifting is a striking illustration of the mental control necessary for normal vision. It requires perfect mental control to think of thousands of things in a fraction of a second; and each point of fixation has to be thought of separately, because it is impossible to think of two things, or of two parts of one thing, perfectly at the same time. The eye with imperfect sight tries to accomplish the impossible by looking fixedly at one point for an appreciable length of time; that is, by staring. When it looks at a strange letter and does not see it, it keeps on looking at it in an effort to see it better. Such efforts always fail, and are an important factor in the production of imperfect sight.

**+ One of the best methods of improving the sight, therefore, is to imitate consciously the unconscious shifting of normal vision, and to realize the apparent motion produced by such shifting. Whether one has imperfect or normal**

**sight, conscious shifting and swinging are a great help and advantage to the eye; for not only may imperfect sight be improved in this way, but normal sight may be improved also.**

Detailed instructions for improving the sight by this method will be given in my forthcoming book, *The Cure of Imperfect Sight by Treatment without Glasses*.

Rapid and tiny shifts, the eyes ability to shift many times per fraction of a second are called Saccadic eye movements, vibrations. The eye produces many different movements, high frequency...

#### OPTIMUMS AND PESSIMUMS

In nearly all cases of imperfect sight due to errors of refraction there is some object, or objects, which can be regarded with normal vision. Such objects I have called *optimums*. On the other hand, there are some objects which persons with normal eyes and ordinarily normal sight always see imperfectly, an error of refraction being produced when they are regarded, as demonstrated by the retinoscope. Such objects I have called *pessimums*. An object becomes an optimum, or a pessimum, according to the effect it produces upon the mind, and in some cases this effect is easily accounted for.

For many children their mother's face is an optimum, and the face of a stranger a pessimum. A dressmaker was always able to thread a No. 10 needle with a fine thread of silk without glasses, although she had to put on glasses to sew on buttons, because she could not see the holes. She was a teacher of dressmaking, and thought the children stupid because they could not tell the difference between two different shades of black. She could match colors without comparing the samples. Yet she could not see a black line in a photographic copy of the Bible which was no finer than a thread of silk, and she could not remember a black period. An employee in a cooperage factory, who had been engaged for years in picking out defective barrels as they went rapidly past him on an inclined plane, was able to continue his work after his sight for most other objects had become very defective, while persons with much better sight for the Snellen test card were unable to detect the defective barrels. The familiarity of these various objects made it possible for the subjects to look at them without strain—that is, without trying to seem them. Therefore the barrels were to the cooper optimums; while the needle's eye and the colors of silk and fabrics were optimums to the dressmaker. Unfamiliar objects, on the contrary, are always pessimums.

In other cases there is no accounting for the idiosyncrasy of the mind which makes one object a pessimum and another an optimum. It is also impossible to account for the fact that an object may be an optimum for one eye and not for the other, or an optimum at one time and at one distance and not at others. Among these unaccountable optimums one often finds a particular letter on the Snellen test card. One patient, for instance, was able to see the letter K on the forty, fifteen and ten lines, but could see none of the other letters on these lines, although most patients would see some of them, on account of the simplicity of their outlines, better than they would such a letter as K.

Pessimums may be as curious and unaccountable as optimums. The letter V is so simple in its outlines that many people can see it when they cannot see others on the same line. Yet some people are unable to distinguish it at any distance, although able to read other letters in the same word, or on the same line of the Snellen test card. Some people again will not only be unable to recognize the letter V in a word, but also to read any word that contains it, the pessimum lowering their sight not only for itself but for other objects. Some letters, or objects, become pessimums only in particular situations. A letter, for instance, may be a pessimum when located at the end, or at the beginning of a line, or sentence, and not in other places. When the attention of the patient is called to the fact that a letter seen in one location ought logically to be seen equally well in others, the letter often ceases to be a pessimum in any situation.

A pessimum, like an optimum, may be lost and later become manifest. It may vary according to the light and distance. An object which is a pessimum in a moderate light may not be so when the light is increased or diminished. A pessimum at twenty feet may not be one at two feet, or thirty feet, and an object which is a pessimum when directly regarded may be seen with normal vision in the eccentric field—that is, when not directly regarded.

For most people the Snellen test card is a pessimum. If you can see the Snellen test card with normal vision, you can see almost anything else in the world. Patients who cannot see the letters on the Snellen test card can often see other objects of the same size and at the same distance with normal sight. When letters which are seen imperfectly, or even letters which cannot be seen at all, or which the patient is not conscious of seeing, are regarded, the error of refraction is increased. The patient may regard a blank white card without any error of refraction; but if he regards the lower part of a Snellen test card, which appears to him to be just as blank as the blank card, an error of refraction can always be demonstrated, and if the visible letters of the card are covered the result is the same. The pessimum may, in short, be letters or objects which the patient is not conscious of seeing. This phenomenon is very common. When the card is seen in the eccentric field it may have the effect of lowering the vision for the point directly regarded. For instance, a patient may regard an area of green wall-paper at the distance, and see the color as well as at the near-point; but if a Snellen test card on which the letters are either seen imperfectly, or not seen at all, is placed in the neighborhood of the area being regarded, the retinoscope may indicate an error of refraction. When the vision improves, the number of letters on the card which are pessimums diminishes and the number of optimums increases, until the whole card becomes an optimum.

A pessimum, like an optimum, is a manifestation of the mind. It is something associated with a strain to see, just as an optimum is something which has no such association. It is not caused by the error of refraction, but always produces an error of refraction; and when the strain has been relieved it ceases to be a pessimum and becomes an optimum.

#### HOME TREATMENT

It is not always possible for patients to go to a competent physician for relief. As the method of treating eye defects presented in this magazine is new, it may be impossible to find a physician in the neighborhood who understands it; and the patient may not be able to afford the expense of a long journey, or to take the time for treatment away from home. To such persons I wish to say that it is possible for a large number of people to be cured of defective eyesight without the aid either of a physician or of anyone else.

They can cure themselves, and for this purpose it is not necessary that they should understand all that has been written in this magazine, or anywhere else. All that is necessary is to follow a few simple directions.

Place a Snellen test card on the wall at a distance of ten, fourteen, or twenty feet, and devote half a minute a day, or longer, to reading the smallest letters you can see, with each eye separately, covering the other with the palm of the hand in such a way as to avoid touching the eyeball.

Keep a record of the progress made, with the dates. The simplest way to do this is by the method used by oculists, who record the vision in the form of a fraction, with the distance at which the letter is read as the numerator and the distance at which it ought to be read as the denominator. As already explained, the figures above the lines of letters on the test card indicate the distance at which these letters should be read by persons with normal eyesight. Thus a vision of 10/200 would mean that the big C, which ought to be read at 200 feet, cannot be seen at a greater distance than ten feet. A vision of 20/10 would mean that the ten line, which the normal eye is not ordinarily expected to read at a greater distance than ten feet, is seen at double that distance. This is a standard commonly attained by persons who have practiced my methods.

Children under twelve years who have not worn glasses are usually cured of defective eyesight by the above method in three months, six months, or a year. Adults who have never worn glasses are benefited in a very short time—a week or two—and if the trouble is not very bad, may be cured in the course of from three to six months. Children or adults who have worn glasses, however, are more difficult to relieve, and will usually have to practice the various methods of gaining relaxation which have been presented from month to month in this magazine and will be described in more detail in my forthcoming book, *The Cure of Imperfect Sight by Treatment without Glasses*.

**It is absolutely necessary that the glasses be discarded. No half-way measures can be tolerated, if a cure is desired. Do not attempt to wear weaker glasses, and do not wear glasses for emergencies. Persons who are unable to do without glasses are not likely to be able to cure themselves.**

Modern Natural Vision Improvement teachers state that reduced, weaker eyeglass lenses can be worn, but only when necessary. In later years Dr. Bates stated glasses can be worn if absolutely essential but, glasses will slow vision improvement.

Children and adults who have worn glasses will have to devote an hour or longer every day to practice with the test card and the balance of their time to practice on other objects. It will be well for such patients to have **two test cards, one to be used at the near-point, where it can be seen best, and the other at ten or twenty feet. The patient will find it a great help to shift from the near card to the distant one, as the unconscious memory of the letters seen at the near-point helps to bring out those seen at the distance.** (Switching close and far. Shift on the E on the close card. Switch to the distant card. Shift on the E on that card. Then back to the close card. Repeat. Remember, imagine the E clear.)

If the patient can secure the aid of some person with normal sight, it will be a great advantage. In fact, persons whose cases are obstinate will find it very difficult, if not impossible, to cure themselves without the aid of a teacher. The teacher, if he is to benefit the patient, must himself be able to derive benefit from the various methods recommended. If his vision is 10/10, he must be able to improve it to 20/10, or more. If he can read fine print at twelve inches, he must become able to read it at six, or at three inches. He must also have sufficient control over his visual memory to relieve and prevent pain.

Parents who wish to preserve and improve the eyesight of their children should encourage them to read the Snellen test card every day. There should, in fact, be a Snellen test card in every family; for when properly used it always prevents myopia and other errors of refraction, always improves the vision, even when this is already normal, and always benefits functional nervous troubles. Parents should improve their own eyesight to normal, so that their children may not imitate wrong methods of using the eyes and will not be subject to the influence of an atmosphere of strain.

#### December, 1919

1 - Report on the Influence of School Books upon Eyesight, second revised edition, 1913.

2 - Pollock: The Education of the Semi-Blind, Glasgow med. Jour., Dec, 1915.

3 - Bates: The cause of myopia, N.Y. Med. Jour., March 10, 1912.

4 - School hygiene, in System of Diseases of the Eye, edited by Norris and Oliver, vol. II, P. 353.

5 - An instrument for viewing the interior of the eye. When the optic nerve is observed with the ophthalmoscope, movements can be noted that are not apparent when only the exterior of the eye is regarded.

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**Read, learn from Dr. Bates, the Best, Original Natural Vision Improvement Teacher**

**Picture Back Cover - Ophthalmologist Bates, Emily C. A. Lierman, Bates and a Bates Method Patient, Student**

## Floating Specks caused by Eyeglasses, Contacts, Laser Surgery, Sunglasses.

**Eyeglasses, Contact lenses, Cornea Laser Surgery, Sunglasses, Staring cause Floating Specks by impairing natural eye movement, shifting, central-fixation, creating strain, tension in the eyes, eye muscles, neck, visual system, brain. Diet also affects the eyes health, function and can cause floaters.**

**Floaters**, Floating Specks – Moving spots, lines, bubbles... in the visual field can appear in many forms, colors. They move when the eye moves and move away from the central field of vision. They are usually harmless.

Scientists state that floaters *Muscae Volitantes*, or *Flying Flies* are debris left in the eye from its development, injury or toxins in the body which can be removed by fasting, cleansing diet, improved liver, kidney health, avoiding: sugar, ingestion of chemicals, or chemicals in the air, on the skin, artery clogging food.

Ophthalmologist Bates states that tension in the mind, staring, squinting, limited eye movement, lack of central-fixation, eye muscle tension causes the appearance of floaters. Worrying about them, looking for the floaters, trying to prevent them from appearing and moving causes staring, eye muscle tension: the floaters then appear/stay in the visual field.

Dr Bates states that floating specks disappear when the mind, visual system, eye muscles, eyes relax causing the eyes to move, 'shift' correct – Relaxed mind, eye muscles, eyes produce all sizes, types of eye movements and it's the tiny, small shifts (saccadic eye movements, vibrations) and central-fixation that occur with relaxation, normal eye function that produce very clear vision, causes the floaters to disappear, stop moving around and the brain shuts them off.

Shift point to point on a fine print letter or small part on a distant or close object: left and right, top and bottom, diagonally... and notice the vision improves and floaters disappear. Clear vision removes floaters.

Practice shifting point to point on a fine print letter or tiny period with the eyes open. Then; imagine shifting on the letter or period with the eyes open without looking at it, see it in the mind only. Blink, relax. Then: do this with the eyes closed using the memory and imagination, then with eyes open again. Notice the eyes do tiny movements even when shifting on the imaginary tiny object with the eyes open or closed. The floaters disappear.

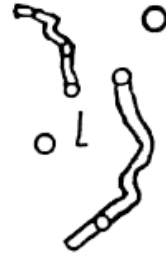
Relaxed eye muscles, neck muscles, exercise, deep breathing improve blood/oxygen, nutrient, lymph flow, circulation to the brain, eyes, allows the eyes to remove waste, return eye fluid, lymph flow to normal. This removes floaters.

All Correct Vision Habits: Shifting, Central-fixation, Blinking, Switching Practice... and other Bates Method Activities; Long Swing, Rock, Sunlight, Deep Abdominal Breathing, good diet, avoiding processed sugar, aspartame, chemical exposure removes floaters. Food that improves the circulation in body, eyes helps cleanse the eyes, improves eye health.

Many floaters, suddenly appearing, flashing lights are a different type of floater and a sign of detached retina or other eye condition. See an Eye Doctor Immediately.

Migraine headaches can cause temporary flashing moving lights, patterns, blind spots in the visual field with or without the headache. Sinus headache, pressure can cause floaters and disrupt eye movement, cause blurry vision.

### Floating Specks.



## See Better Eyesight Magazine for a variety of Articles on Floaters

### BETTER EYESIGHT

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

October, 1919

#### FLOATING SPECKS

A man returning from Europe was looking at some white clouds one day when floating specks appeared before his eyes. He consulted the ship's doctor, who told him that the symptom was very serious, and might be the forerunner of blindness. It might also indicate incipient insanity, as well as other nervous or organic diseases. He advised him to consult his family physician and an eye specialist as soon as he landed, which he did. This was twenty-five years ago, but I shall never forget the terrible state of nervousness and terror into which the patient had worked himself by the time he came to me. It was even worse than that of the clergyman, who was always ready to admit that his fears were unreasonable. I examined his eyes very carefully, and found them absolutely normal. The vision was perfect both for the near-point and the distance. The color perception, the fields and the tension were normal; and under a strong magnifying glass I could find no opacities in the vitreous. In short, there were absolutely no symptoms of any disease. I told the patient there was nothing wrong with his eyes, and I also showed him an advertisement of a quack medicine in a newspaper which gave a great deal of space to describing the dreadful things likely to follow the appearance of floating specks before the eyes, unless you began betimes (in good time, early) to take the medicine in



Girl lying in the grass on a hill looking at the blue sky, white clouds and seeing floaters, imaging they are angels or outer space aliens, secret friends with magic powers that protect her.

question at one dollar a bottle. I pointed out that the advertisement, which was appearing in all the big newspapers of the city every day, and probably in other cities, must have cost a lot of money, and must, therefore, be bringing in a lot of money. Evidently there must be a great many people suffering from this symptom, and if it were as serious as was generally believed, there would be a great many more blind and insane people in the community than there were. The patient went away somewhat comforted, but at eleven o'clock—his first visit had been at nine—he was back again. He still saw the floating specks, and was still worried about them. I examined his eyes again as carefully as before, and again was able to assure him that there was nothing wrong with them. In the afternoon I was not in my office, but I was told that he was there at three and at five. At seven he came again, bringing with him his family physician, an old friend of mine. I said to the latter:

"Please make this patient stay at home. I have to charge him for his visits, because he is taking up so much of my time; but it is a shame to take his money when there is nothing wrong with him."

What my friend said to him I don't know, but he did not come back again.

I did not know as much about *muscae volitantes* then as I know now, or I might have saved both of these patients a great deal of uneasiness. I could tell them that their eyes were normal, but I did not know how to relieve them of the symptom, which is simply an illusion resulting from mental strain. The specks are associated to a considerable extent with markedly imperfect eyesight, because persons whose eyesight is imperfect always strain to see; but persons whose eyesight is ordinarily normal may see them at times, because no eye has normal sight all the time. Most people can see *muscae volitantes* when they look at the sun, or any uniformly bright surface, like a sheet of white paper upon which the sun is shining. This is because most people strain when they look at surfaces of this kind. The specks are never seen, in short, except when the eyes and mind are under a strain, and they always disappear when the strain is relieved. If one can remember a small letter on the Snellen test card by central-fixation, the specks will immediately disappear, or cease to move; but if one tries to remember two or more letters equally well at one time, they will reappear and move. Usually the strain that causes *muscae volitantes* is very easily relieved. [See; April, 1925 and other issues;](#)

## Stories from the Clinic

### NO. 76: CATARACT

By EMILY C. LIERMAN

MANY patients, after being cured of imperfect sight, go their way and we never see them again. However, many come back, even after a period of five years or more, to report, or to show their gratitude. If a patient is cured quickly, he is very apt to forget that he ever had eyestrain. Normal vision helps him to forget, and he is able to go on with things that interest him without tension or strain.

There is nothing that affects the whole nervous system more than eye strain.

I have deep sympathy for patients suffering from cataract. Some of these have told me that, when they first discovered, or were told that they had acquired cataract, the shock was so great it sometimes made them very ill. I have often wished that I could broadcast to every human being troubled with cataract, that they need not worry about an operation, nor fear blindness.

While treating patients at the Harlem Hospital Clinic, Dr. Bates placed under my care many patients with cataract. Some of them were children who were born with it, while others acquired it from an injury of some sort. If they faithfully practiced the daily treatment for their particular case, they always improved. There were no exceptions, although in all cases where the patient did not practice enough, it took much longer for a cure. Adults were also cured quickly when the directions for home treatment were faithfully carried out. Age made no difference.

A colored mammy, who was a faithful servant of one of our private patients, came regularly, three days a week for many months, and was treated for cataract. I have described her case in my book, "Stories from the Clinic." In the beginning of her treatment, she could not see the letters of the test card at five feet. As she explained it in her dialect: "Do you know, ma'am, ah can see nothin', no ma'am, nothin' at all at dis distance!"

Long periods of palming, early in the morning and late in the afternoon, when her work was done, helped her sight. In the clinic she was taught to sway her body slightly from side to side and to blink all the time. The swaying helped her to see things about the room moving opposite to the movement of her body. **The blinking prevented the stare, which is usually the cause of cataract.** The quickest way to obtain a cure is by palming, and I advise my private patients to practice it for several hours or many times each day. It would be impractical, however, to advise a clinic patient to use the same method, because they cannot spare the time from their work, nor can the employer spare them. If such advice were given them, their answer would surely be: "This treatment is only for those who can afford the time." Dr. Bates often tells them that it takes less time to use their eyes correctly than it does to use them incorrectly.

Clinic patients, as well as private ones, are advised to relax all day long. Mammy was to see things moving all day by watching her broom as she swept the floors; the washboard as she washed the clothes; the clothes-wringer as she turned the handle; and the dishes as she dried them and put them in the cupboard. We treated her many times, but occasionally she had a relapse. These were sad times for mammy, when she had tears in her eyes and a heavy heart. Frequently she would say: "Ma'am ah knows der is no hope for me. Ah has displeased de good Lord." A kind word or two always helped her, and I made sure that she received many of them.

As time went on, she obtained normal vision with the use of the test card, and became able to read very fine print and to thread a needle. We left the Harlem Hospital Clinic, never thinking that we would hear from her again. Six years had passed, and new patients were coming and going from our own clinic, when one day about three months ago, we received a letter from mammy. All

through the letter were words of gratitude and praise for what we had done for her. **She is now seventy-eight years old, and can still read her newspaper and thread a needle.** She asked for permission to come to see us. She wanted the Doctor to look at her eyes to prove that her cataract had entirely disappeared. We, of course, were anxious to see her. When she came both of her eyes were examined and no sign of cataract was found in either eye. Her vision with various test cards was 10/10, and she read fine print without any difficulty, because she did as she was told. She was cured. It was not always easy for her as her work at times required good eyes. Her madam had patience with her for she, also, was under treatment. During mammy's last visit, she said: "Ah jest knowed dat ah was cured 'cause ah could see de crumbs on de carpet to brush up, an' ah could see de dust all ober de furniture an' ah cleans better. De sun is clear now an' not in de mist no mo'."

About a month ago, another patient came with a report of good vision. She is **over eighty years old**, and has a disposition just as cheery as she had when I first knew her, about eight or nine years ago. Perhaps our readers will remember an article I wrote about her. She is the patient who was employed in an orphanage. Her duties there were to see that all the buttons were sewed on the clothes of little ones at the Home. She said she was the only daisy in the country while she was there. From the very beginning she had infinite faith that Dr. Bates could cure her without an operation. During one of her early treatments, when she noticed a decided improvement in her sight while palming, she could not resist the temptation to peep through her fingers at me and say: "I'll fool them yet." I asked her what she meant and she answered: "Oh! The other doctors who want to operate on my eyes." Well, she kept her word. She fooled them and was entirely cured. She has never worn glasses since her first treatment and the only reason for her being cured is, that she practiced faithfully the methods of treatment that helped her most. When she looks at you, her young, blue eyes twinkle and she wears a smile that won't come off.

### **Better Eyesight Magazine - November, 1927 – Alexander Technique**

The question that comes up more prominently than any other is: What can the patient do to bring about relaxation of any group of muscles? A man, by the name of F.M. Alexander, of London, England has accomplished a great deal in the cure of all kinds of diseases. He says that all diseases of the body are caused by tension. They can all be cured by the relaxation of the tension. He has offered many methods of bringing about relaxation in the most interesting, although seemingly incredible way and the most successful is to bring about relaxation by having the patient state that it is desired.

For example, a patient sitting in a chair or lying down on the floor, whichever is easier, says: **"I desire relaxation of the muscles of my neck, so that my head can be lifted forwards and upwards." This is sometimes repeated one hundred to a thousand times.** Mr. Alexander has always succeeded in having the patient bring about **relaxation of the muscles of the neck** by this method.

Mr. Alexander goes further and brings about relaxation of the muscles of the chest, both outside and inside, by having the patient say: "I wish my shoulder to relax and to move downwards and backwards. I wish my chest to relax and to move backwards. I wish my whole body to relax and move backwards. I wish my foot to move backwards without effort, without strain of any muscles of the body."

It has been a great shock to many orthodox physicians to observe the cures that Alexander has made. Epilepsy, considered by the medical profession to be incurable, has been cured by relaxation, without the use of any other form of treatment. Of course, rheumatism responds perhaps more quickly to relaxation than a great many other diseases, but there are cases of so-called rheumatism affecting the shoulder in which all parts of the joint become immovable.

One patient was afflicted with Parkinson's disease; all the joints of the body became so fastened together, so immovable, that the patient was unable to produce any voluntary movement of the hand or the arm. As time passed, the voluntary and the involuntary muscles gradually became useless from tension. Mr. Alexander had the patient relax those muscles which she could relax most readily. When this was done, the more difficult muscles became relaxed, until finally she was cured completely by the relaxation of tension.

[\(The Alexander technique continues to be popular today; original and modern Natural Vision Improvement teachers apply neck relaxation, movement as a main vision improvement treatment. The Alexander Technique is known for improving breathing and vision.\)](#)

**[See the E-Book for entire Better Eyesight Magazine Collection.](#)**

## EYECARTS

Letter size for the charts on the following pages are approximate; print from the PDF E-Book and resize with a copy machine for exact measurement. Print the 20/20 line 3/8 inches. When letters on that line and below are clear; vision is clearer than 20/20 for distant vision at 20 feet and farther. Print the charts small and fine print for close vision practice at 5 feet and up to 1 inch from the eyes.

**Read, See Small letters Clear on a Familiar Eyechart Daily;  
Both eyes together, one eye at a time, both eyes together again.**

### SNELLEN TEST CARDS

There should be a Snellen test card in every family and in every school classroom. When properly used it always improves the sight even when it is already normal. Children or adults with errors of refraction, if they have never worn glasses, are cured simply by reading every day the smallest letters they can see at a distance of ten, fifteen, or twenty feet.

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## Eyechart Videos

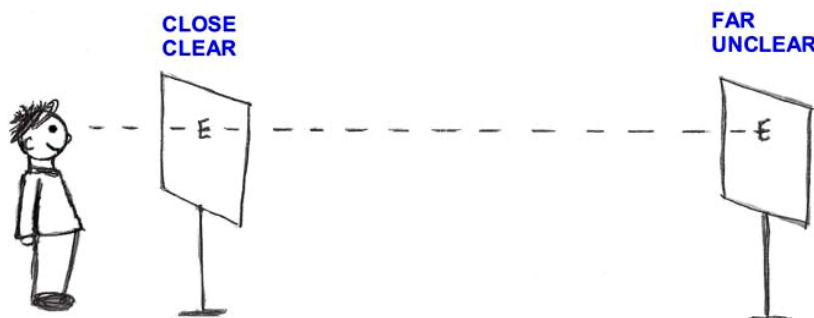
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Watch on computer. Can also be converted for television.



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[http://www.youtube.com/watch?v=mYpsYPPV\\_hg&feature=channel](http://www.youtube.com/watch?v=mYpsYPPV_hg&feature=channel)  
<http://cleareyesight.info/id79.html>

# 1 - EYECHARTS TO TEST AND IMPROVE CLOSE AND DISTANT EYESIGHT

SWITCH AND SHIFT ON LETTERS ON TWO IDENTICAL EYE CHARTS PLACED AT CLOSE AND FAR/ CLEAR AND UNCLEAR DISTANCES.



SHIFT FROM PART TO PART (DOT TO DOT) ON THE E'S



Videos - <http://www.youtube.com/watch?v=863yFmc-Ius>

Meaning of 20/20; (for Distant Vision)

- +The top number indicates the distance the person is standing from the chart.
- +The bottom number indicates the size of the letter, the line the eyes are looking at.  
A 20/20 letter is 3/8 inch. high.

**E** This E is about 3/8 inch. on 100% computer screen.

- +The bottom number also indicates the distance that a person with clear vision sees the letter clear.

Example; the 20/20 line on the test chart for distant vision;

- +The top number, 20 indicates; the person is standing 20 feet away from the letter on the eyechart.
- +The bottom number, 20 indicates the person is looking at the 20/20 line, 3/8 inch. letter and, that; a person with clear 20/20 vision can see the letter clear at 20 feet away.

The eyechart is placed at 20 feet to test distant vision because the eyes do not need to un-converge, un-accommodate any further when looking at about 20 feet and farther into the distance. If the letters are seen clear at 20 feet, they are seen clear at all distances beyond 20 feet.

Here's another example; 20/200;

- +The top number (20) indicates the person is standing 20 feet away from the eyechart.
  - +The bottom number (200) indicates the size of the letter, line the person is looking at.
- The 200 line letter is the largest letter on the top of the chart. A 20/200 letter is 3 1/2 inch. high.
- +The bottom number, (200) also indicates that a person with

Distant vision - Big C eyechart with a small 5 line added at bottom.

20 = 20 feet  
20 = 3/8 inch letter - 20 line.  
Normal, clear vision.

20 = 20 feet  
5 = Smallest letter, bottom of chart - 5 line.  
Clearer than 20/20.

40 = 40 feet  
5 = Smallest letter, bottom of chart - 5 line.  
Most clear vision, much clearer than 20/20.  
Person sees 5 line at 40 feet away.

20 = 20 feet  
200 = Largest letter, top of chart - 200 line.  
Most unclear vision for this eyechart.

5 = 5 feet  
200 = Largest letter, top of chart.  
Vision more unclear.  
The person must stand closer to the chart, at 5 feet, to see the 200 line letter clear.

20 = 20 feet  
300 = Letter larger than 200 line.  
More unclear than 20/200.  
Person cannot see the 200 line clear.  
A larger, 300 size letter is seen clear.  
The 200 and other lines might be seen clear at closer distances to the chart.

C  
L  
E  
A  
R

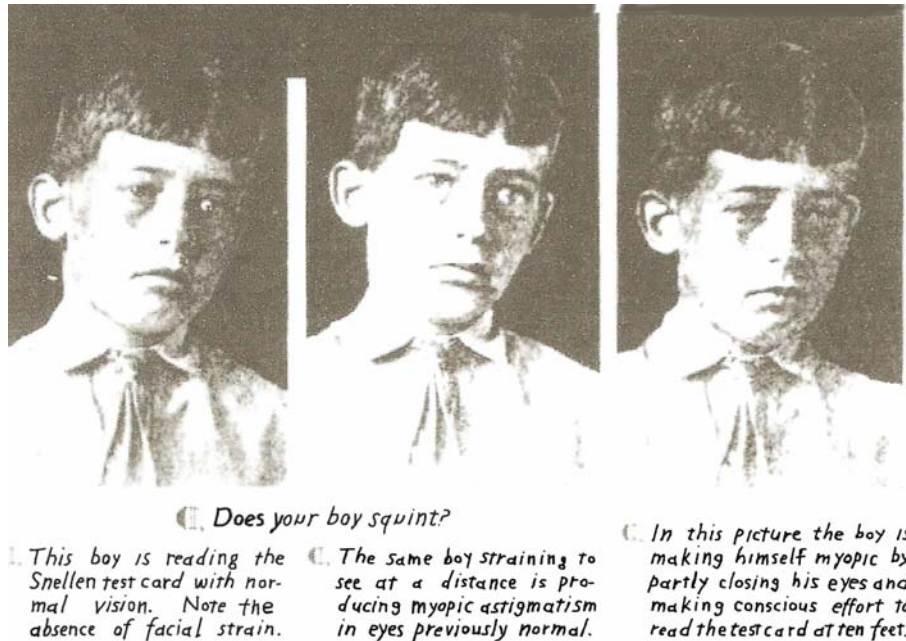
U  
N  
C  
L  
E  
A  
R

clear 20/20 vision can see the letter clear at 20 feet and up to 200 feet away. A person with 20/200 distant vision can see the large 20/200 letter at 20 feet but cannot see it clear farther than 20 feet. It may be seen clear at closer distances. Smaller letters below the 20/200 line are not seen clear at 20 feet and farther away. 20/200 vision is very unclear, much less clear than 20/20. Vision can be more unclear; 20/300, 5/200... Many people with 20/200, 300 and more unclear vision have attained 20/20 and clearer vision with practice of the Bates Method.

20/40 vision is clearer than 20/200 but less clear than 20/20. 20/40 is considered legal for driving in most states. 20/40 is close to 20/20 clarity and people can function comfortably with 20/40 vision without wearing eyeglasses. 20/30, 20/25 is clearer than 20/40 and almost 20/20. When vision is less clear than 20/40; 20/50, 70, 100... it is still best to avoid wearing eyeglasses as much as possible. Eyeglasses maintain and increase the eye muscle tension and blur. When glasses are avoided the eyes, eye muscles, mind/brain, (visual system) relax, correct vision habits are easily applied and clarity of vision improves.

Close vision is tested with smaller letters with the eyechart placed at various distances closer than 20 feet. Reading vision is tested at 3 ft. to 6 inches and closer to the eyes with small and fine print. Seeing fine print clear at 5 to 1 to 1/4 inches from the eyes is very clear vision. Healthy for the eyes.

### Relax and Shift, Blink when Reading the Eyechart. Use Central-Fixation



### Immediate Production of Myopia and Myopic Astigmatism in Eyes Previously Normal by Strain to See at the Distance;

**Fig 1 - Boy reading the Snellen test card with normal vision. Note the absence of facial strain. A boy with normal eyes reading the X line of the Snellen test card at 10 feet. Notice the expression of the eyes with the focus completely relaxed.**

**Fig 2 - The same boy trying to see a picture at twenty feet. The effort, manifested by staring, produces compound myopic astigmatism, as revealed by the retinoscope. Simultaneous retinoscopy indicated compound myopic astigmatism. He was unconscious of the fact that his eyes were focused for a near point. Note the manifestation of effort by staring.**

**Fig 3 - The same boy making himself myopic voluntarily by partly closing the eyelids and making a conscious effort to read the test card at ten feet. Functional myopia produced voluntarily by partly closing the eyelids (squinting) and making an effort to read the Snellen test card at ten feet.**

There are large and small close and distant eyecharts on the last pages of this book and in the Free PDF E-Book.

It is difficult to print the exact, correct letter size from a computer. Try printing at 100% or larger.

The Big C and E charts print out on 4 separate pages, 11 x 8 1/2 inches, landscape. Tape them together after printing.

If the print is too light, darken it to dark black with a black marker.

If they print too small or large; place them in a copier and use the zoom setting to enlarge or reduce the letters until all letters are the correct eyechart size. See correct sizes listed below.

Letters on the charts can be reduced to small and fine print for testing, improving close vision and reading vision distances, 3 feet, 20, 10, 7, 6, 5, 3... inches away from the eyes.

Small charts are also provided.

The charts can be printed from the PDF E-Book with white letters on a black, blue... background. White letters are easy to see and relaxing to the eyes. Color activates, is healthy for the eyes, brain, visual system.

The reader can also create small charts as a identical copy of the big C, E charts. Place the identical copy at a clear close distance and look at the identical clear letters to strengthen the memory, imagination of the same letter on the distant chart. If preferred, use a large close and distant chart.

The Big C chart is the eyechart Ophthalmologist Bates refers to in his Better Eyesight Magazine. The large big letter E and C charts are for testing distant vision. Print the chart with correct letter size;

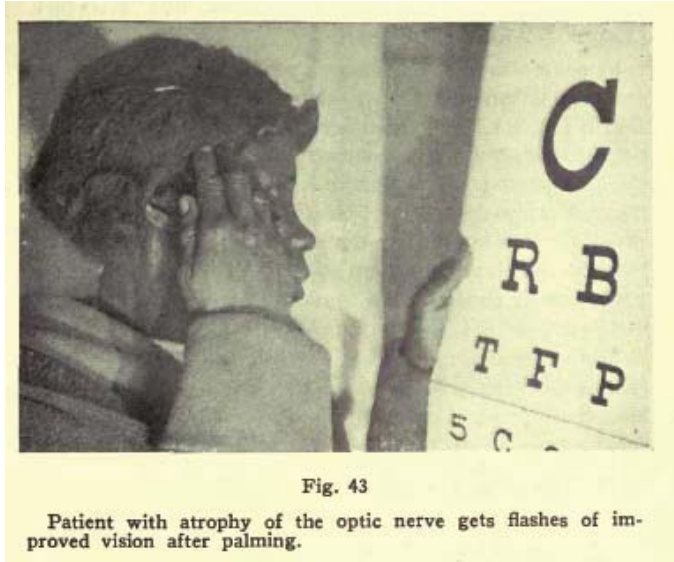


Fig. 43

Patient with atrophy of the optic nerve gets flashes of improved vision after palming.

Start with the big letter E (or C) at the top of the chart - 20/200 line;

20/200 - 3 1/2 inch. high

20/100 - 1 3/4 inch.

20/70 - 1 1/4 inch.

20/50 - 7/8 inch.

20/40 - 11/16 inch.

20/30 - 1/2 inch.

20/20 - 3/8 inch. ----- Normal clear vision at 20 feet away.

20/15 - 1/4 inch. All numbers below 20/20 indicate clearer than 20/20.

20/10 - 3/16 inch.

20/5 - 3/32 inch.

20/4, 3, 2, 1... Letters are smaller. Very clear vision.

Standing farther away and seeing the letters clear;

Example 40/5; standing 40 feet away and seeing the 20/5, 3/32 inch letter and/or smaller letters clear indicates very clear vision, much clearer than 20/20.

## Practice Shifting, Central-Fixation, Switching Close and Far on the Eyecharts

### Print the Eyecharts.

Make two identical copies of the chart, place them at close and far distances. Practice Correct Vision Habits: shifting, central-fixation... on the charts once or more per day.

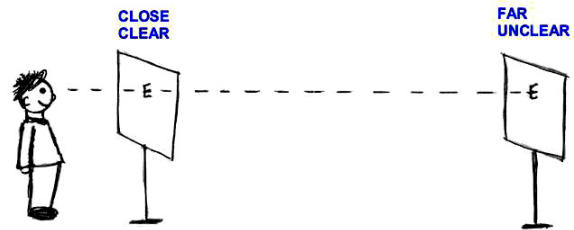
Practice in the sunlight, sun shining over the shoulder onto the charts.

Shifting, switching on the two identical charts improves the memory, imagination, ability to remember, imagine and see the letters clear, improves the brains function of storing clear images of objects in the memory.

The eyecharts become familiar objects.

Familiar objects are relaxing to the mind, eyes and are seen clear. When a letter on the chart is seen clear at a specific distance; all objects at that distance are seen clear.

SWITCH AND SHIFT ON LETTERS ON TWO IDENTICAL EYE CHARTS PLACED AT CLOSE AND FAR/ CLEAR AND UNCLEAR DISTANCES.



SHIFT FROM PART TO PART (DOT TO DOT) ON THE E'S



Practice Correct Vision Habits #1 to 8 on two identical eyecharts;

One chart is placed at a close distance.

The other chart is placed at a far distance. See picture.

Keep one chart at a clear distance.

When looking at a chart, place the chart at eye level, directly in line with the eyes, face.

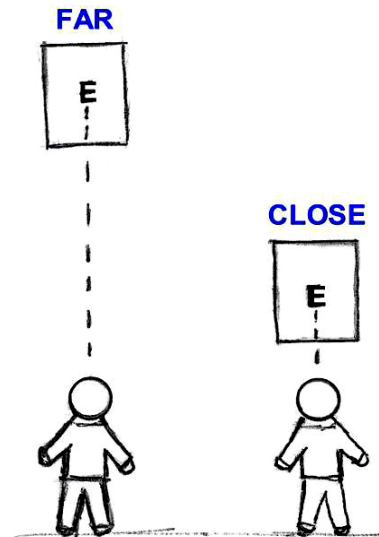
The letter the eyes look at is placed in the center of the visual field; between the left and right eyes, at eye level.

The far chart is placed about 1 foot to the left or right (alternate) so the close chart does not block the view of the far chart.

When looking at a chart, maintain central-fixation;

when looking at the close chart - stand directly in front of it.

When looking at the far chart - move and stand directly in front of it. See picture on right.



Shift on letters on the clear and unclear charts and remember, imagine and see the letters dark black and clear.

Practice with the eyes open, closed, open.

Practice with both eyes together, then one eye at a time, then both eyes together again. If vision is less clear in one eye, practice extra time with that eye. Then again a bit with the other eye, then both eyes together again to keep the vision balanced, equal in both eyes.

Keep the letter between the eyes, at eye level, center of the visual field when using both eyes together and when using one eye at a time.

Cover the eye not in use with a eyepatch and keep the eye open under the patch when the eye in use is open. Blink and relax.

Example; Person needs distant vision improvement.

Place one chart at a far, unclear distance.

Place the other identical chart at a clear close distance.

Look at the letter E at the clear close distance; shift on the letter.

Remember, imagine, see the E dark black and perfectly clear.

Do this with the eyes open, then, in the imagination with the eyes closed, then with the eyes open again.

Then; switch to the unclear distant chart.

Look at the identical letter E.

Shift on the E and continue to remember, imagine the E is dark black and clear.

Practice with the eyes open, closed, open.

With practice the distant E will be seen clear.

Switch back to the clear close E.

Repeat; shift on the E, Remember, imagine, see it dark black and clear.

Practice with the eyes open, closed, open.

Looking at the clear close E reinforces the clear image of the E in the brain/memory and helps the brain and eyes work together to produce a clear image of the E when it is seen at the far distance.

Switch back to the E at the far distance.

Shift on it, remember, imagine and see it dark black and clear.

Blink, breathe, relax.

Practice switching, shifting on the close and far E's with both eyes together, then one eye at a time, then both eyes together again for perfect equally clear 20/20 and clearer vision in the left and right eyes at close and far distances. Example: Both eyes together, then one eye at a time: start with either eye: left, then right, then left, right... If vision is less clear in one eye, practice extra time with that eye. Then; end with both eyes together again.

Allow the eyes, head/face, neck and body to relax, move freely when looking at the letters. Relaxation and movement bring clear vision.

Eye, head/face, neck, body immobility, tension, staring, squinting, straining, trying hard to see the letters clear produces unclear vision.

Practice on other letters.

Practice on smaller letters.

Practice at a variety of close, middle, far distances for clear vision at all distances.

Practice on two identical fine print charts with medium, small, smaller, and fine print size letters.

Place the charts at two different close distances.

Memorize the letters on the chart. Memorizing the letters causes the chart to become a familiar object, something that is easy to see. Familiar objects relax the mind, eyes and activate clear vision.

When the brain memorizes the letters, becomes familiar with them, there is not any effort to see them, mental strain and eyestrain are avoided, the mind/brain, eye muscles, eyes stay relaxed when viewing the chart and the letters are seen clear. This relaxation and clear vision continues when looking at other objects.

When taking a eye test at the eye doctors office, the patient is often hurried, pressured to see the letters on a unfamiliar eyechart clear.

This causes temporary mental strain, leads to squinting, staring, effort to see the letters. This causes temporary eye muscle tension, slightly altered eye, cornea shape with incorrect focus of light rays in the eye causing temporary blur that results in a unnecessary prescription for eyeglasses and over-corrected lenses that are too strong and cause increased eye muscle tension, abnormal eye shape, mental strain, increased blur and future prescriptions for stronger eyeglass lenses.

If the patient knew the letters on the chart and was allowed to relax, and use Correct Vision Habits; shifting, central-fixation... on the letters; the mind, eye muscles, eyes would remain relaxed, the letters on the memorized and unfamiliar eyecharts would be seen clear and the eyeglass prescription would be avoided.

Place a familiar eyechart in the home, work, school and shift on the letters occasionally.

Practice all Correct Vision Habits on the letters;

Central-fixation; the letter the eyes are looking at is placed in the center of the visual field; between the eyes, at eye level.

Look at and see one letter darkest black, clearest at a time in the center of the visual field. The letter the eyes are looking at is in the center of the visual field and is clearest.

Other letters on the chart around and away from the letter are in the peripheral field and are less clear. Avoid staring, squinting, trying hard to see letters clear. Blink, relax and combine shifting with central-fixation;

When looking at a letter; shift on it from small part to small part. Move the small exact center of the visual field part to part, (point to point) on the letters. Blink, let the eyes move. Shift relaxed, easy, continually, restful.

See Doctor Bates directions in his articles in the Close Vision chapter; 'The Menace of Large Print' and 'Think Right'.

See the 'Illusion of Oppositional Movement'; the letter appears to move in the opposite direction the eyes move to, a small, quick movement no larger than the size of the letter. 'The Swing.' See Better Eyesight Magazine and this Chapter; The Long Swing, Rock, Short Swing.

When reading a eyechart;

Don't spend a long time looking at a letter if it's unclear. Avoid staring, squinting, straining, trying hard to see it. Shift on it, then move, shift to a new letter. Shift on that letter.

Blink, breathe abdominally, relax.

Shift from letter to letter on the chart.

It is ok to stay on one letter if relaxation, eye shifting occurs. Relax, shift point to point-see small parts-let the eyes move on the letter automatically, on their own.

The eyes, head/face, neck and body are relaxed and move freely. Move the head/face and body with the eyes when shifting on a letter and from one letter to another.

When moving to a new letter, move the head/face, body with the eyes and look/face directly at the letter.

The center of the visual field is clearest. The center of the visual field moves with the eyes from letter to letter, placing each letter the eyes look at, one letter at a time, in the center of the visual field, keeping each letter perfectly clear.

The exact center of the visual field is most clear; place the part of the letter the eyes look at in the exact center of the visual field.

Shift the eyes (visual attention) from small part to small part, moving the small exact center of the visual field from small part to small part (point to point), seeing one small part (point) of the letter darkest black, clearest at a time in the exact center of the visual field. (The part (point) of the letter the central field is on, moving upon/over is clearest while the central field is on that part.)

Practice on small and fine print letters.

The exact center of the visual field; produced by the fovea centralis in the center of the macula, in the center of the eyes retina can be seen/measured by looking at a capitol letter E, 3/8" high, 20/20 line of the distant eyechart, from 20 feet away.

When looking directly at the E, the E occupies space in the center of the visual field produced by the macula and fovea. When looking at a small part of the E (Example; a part in the center of the E), that small part is in the exact center of the visual field produced by the fovea.

+Light rays from this part of the E focus on the center of the fovea when looking at this part, placing it in the center of the visual field.

+Light rays from other areas of the center of the visual field focus on the macula around the fovea.

+Light rays away from the E in the peripheral field of vision focus on the peripheral field of the retina around/away from the fovea and macula.

The fovea (especially the center of the fovea) produces the clearest vision, clearer than 20/20.

The outer fovea and macula produce very clear vision, clearer than 20/20, but not as perfect as the center of the fovea.

The peripheral field of the retina produces less clear vision.

The far outer peripheral field is the most unclear.

See a letter clear by placing it in the center of the visual field and then;

use the exact center of the visual field; place one small part of the letter at a time in the exact center of the visual field and see it darkest black and clearest.

Avoid staring; always shift the eyes to prevent staring, immobility; shift/move the eyes/visual attention (exact center of the visual field) from small part to small part on the letter; top to bottom, side to side, corner to corner, middle; shift from small part to small part in any direction on the letter.

Example; shift from dot to dot on the letter E. See picture on page 5.

As the eyes/exact center of the visual field move from part to part (dot to dot); see each part, one small part (dot) at a time darkest black, clearest in the exact center of the visual field.

The entire visual field moves with the eyes as the eyes shift from part to part;

### Example;

Looking at the small part (dot) in the middle of the E.

This part is in the exact center of the visual field and is darkest black and clearest. All other parts are in the peripheral field and are less clear.

Now; shift from that small part in the middle of the E to a small part (dot) on the far edge of the top right side. The small part on the top right is now in the exact center of the visual field, its light ray is focusing on the fovea and it is seen darkest black and clearest.

The previous part and all other parts of the E are in the peripheral field and less clear.

Shift to a new small part; that new part is now in the exact center of the visual field and is darkest black and clearest. Blink.

The eyes can shift to a new part each second, fraction of a second, but, in that short time that a part is in the exact center of the visual field, it is seen darkest black and clearest. This is central-fixation.

When the eyes see the part/area of visual attention with the exact center of the visual field, central-fixation, the exact center is very clear, much clearer than 20/20, and the outer center of the visual field is also very clear, clearer than 20/20 and the peripheral field is normally less clear but is at its maximum clarity.

Seeing clear with central-fixation improves clarity and function of the entire visual field.

When the mind, body, eyes are relaxed the letters are clear.

Do the rock and long swing in front of the eyechart and do not try to see any letters clear. Just relax, rock or swing left and right and notice the soothing oppositional movement of the chart;

When the eyes, head/face, body swing left <; the chart appears to move right >.

When the eyes, head/face and body swing right >; the chart appears to move left <.

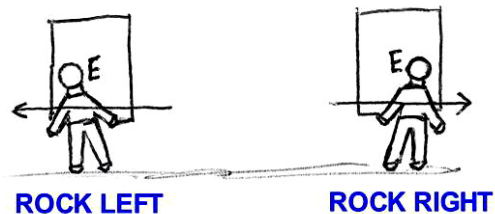
The rock, long swing.

Relax and rock or swing left and right without trying to see the letters.

Then, stop moving left and right. (Some small relaxed movement can be maintained.)

Look at the chart and shift on a letter for a second or two. Blink, breather, relax.

ROCK LEFT AND RIGHT IN FRONT OF THE CHART  
RELAX, DONT TRY TO SEE THE LETTERS CLEAR



### 'The Short Swing'

See the 'Illusion of Oppositional Movement' of the letter when the eyes shift on it;

+Shift from the left side of the letter to the right side >;  
the letter appears to move 'Swing' to the left <.

+Shift from the right side of the letter to the left side <;  
the letter appears to move 'Swing' to the right >.

Shift up, down, any direction and see the letter appear to move in the opposite direction the eyes/visual attention move to.

Practice shifting and seeing oppositional movement on large, medium, small and fine print letters at close, middle and far distances.

The movement of the letter is short, less than the width of the letter.

Blink and relax.

Seeing oppositional movement of the letter relaxes the mind and eyes, improves the clarity of vision.

Practice shifting on the letter and seeing the illusion of oppositional movement with the eyes open, then in the imagination (use memory, imagination) with the eyes closed, then with the eyes open again.

The long swing and rock are longer movements of the eyes, head, body and produce a longer (swing) appearance of oppositional movement.

Shifting on a small letter produces a smaller oppositional movement, a small Short Swing.

With practice, smaller shifts, on small letters, with a small appearance of oppositional movement Short Swing of the letter can be done. This greatly improves shifting, central-fixation and produces very clear vision. Short, small and tiny shifts, swings produce very clear vision, clearer than long, larger shifts, swings. All shifts, swings activate relaxation, movement and improve the vision.



Next; return to the rock or long swing.

The rock, long swing keeps the mind, body, neck, eyes relaxed, keeps the eyes shifting and vision clear. Stop rocking, swinging left and right every once in a while and then, shift on the letters on the chart again. Notice they are seen clear when the mind/eyes are relaxed and there is no effort to see.

**Shorten the rock for a short shift, swing:**

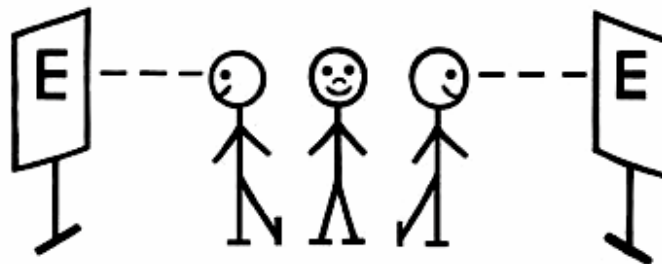
Rock left and right 2 feet, then 1 foot, then 6 inches, 4,3,2,1, 1/2... inch. Rock with a small movement 1/2 - 1 - 2... inches left and right and shift on the letters on the eyechart. See a small swing of oppositional movement of the letters. The rock keeps the eyes, head/face, neck, body relaxed, moving when looking at a letter. This prevents staring and blur. The small shift, swing also produces clear vision.

Practice Dr. Bates method of 'Flashing' the Letters; looking at, shifting on a letter for only a fraction of a second, then looking away to a different letter or object, shift on that object, then return to the letter, shift on it, fraction of a second, then look away, return, look away...

This prevents effort to see, prevents strain and blur; there is not enough time to strain, try to see any object so relaxation is maintained.

The normal eye moves continually, restful, shifting easy from point to point.

Practice The Long Swing with 2 Identical Eyecharts: Flashing, Shifting for a 'Fraction of a Second' on letters on the Eyecharts:



**The Long Swing with Two Eyecharts**

Identical eyecharts placed on left and right side of the body.

Swing and turn left and right and 'Flash' glance at, shift on a letter on the eyechart for a 'fraction of a second' -

Swing, turn left and 'flash' a letter on the left chart: Blink and shift quickly, easy on the letter. Do not stop swinging.

Swing and turn right and flash a letter on the right chart.

Keep swinging left and right, glancing at the letters. Relax, no effort to see - vision becomes clear.

Place 2 identical eyecharts on the left and right sides of the body.

Swing left and right and Flash a letter on the eyechart for a fraction of a second;

+Swing left < ; shift on, flash the letter for a fraction of a second on the left chart. Blink.

+Swing right > ; shift on, flash the identical letter for a fraction of a second on the right chart. Blink.

Then swing back to the left side, flash the same letter again... Repeat right, left, right, left...

Do this without stopping; keep moving, swinging left and right. Do not stop swinging when looking at the letter. The eyes, head/face and body move, swing and turn left and right together, at the same time, in the same direction. See The Long Swing.

The continual movement keeps the eyes, mind, body relaxed, left and right brain hemispheres integrated. The very short time the eyes, head, body are facing the chart prevents strain, staring at the letter. The eyes shift on the letter quick, easy, do not try to see it clear. Relaxation occurs and vision becomes clear. Practice on identical letters, then on any letters, then on smaller letters.

'Flashing the letters' = Shifting on a letter for a fraction of a second produces a 'Flash' of clear vision. The flash of clarity may last only a second but with practice, maintaining relaxation, the flashes occur more often, last longer, and vision remains clear.

Practice palming, covering the eyes, then reading, flashing the letters on the eyechart. | **Palming**-chapter 6.

- +Palm for a while and relax.
  - +Uncover and open the eyes and look at a letter on the chart.
  - +Shift on the letter for only a second or fraction of a second.  
No effort to see clear.
  - +Then cover the eyes and palm again. Think pleasant thoughts. Remember, imagine shifting on the letter and see it dark black and clear in the mind. See the mental picture of the letter show oppositional movement as the eyes shift on the image of the letter.
  - +Uncover, open the eyes and shift on the letter again, fraction of a second.
  - +Palm again.
  - +Repeat palming and shifting on the letter (flashing the letter) for a fraction of a second.
- This method keeps the eyes, mind relaxed, prevents effort to see, mental, visual strain and blur. Flashes of clear vision will occur.  
When relaxation of mind, eyes continues, the vision, letters remain clear.

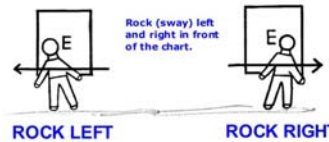
Rock, sway the body left and right in front of the eyechart again and see the chart, letters move, swing in the opposite direction.

Then; Reduce the length of the rock to 2-4 inches, moving left and right and shift part to part on a letter. Let the eyes move freely to another letter, then another as the body, head, eyes move left and right. No effort to see. Just relax, shift, blink, breathe abdominally.

Rock up and down 1-2 inches. Rock on the feet 1-2 inches forward and backward.

<http://www.youtube.com/watch?v=863yFmc-Ius>  
[http://www.youtube.com/watch?v=mYpsYPPV\\_hq](http://www.youtube.com/watch?v=mYpsYPPV_hq)

Click the links for YouTube Videos teaching Natural Vision Improvement with Eyecharts.



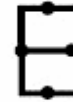
The pothooks eyechart is designed for children, adults that have not yet learnt to read the alphabet. The person points their hand in the direction the E is pointing.

Familiar objects relax the mind, eyes and keep the vision clear. This eyechart is easy to see clear because it is a **familiar object**: the person knows that every letter on the chart is an E. This makes it easier, more relaxing to look at the different size unclear E's and use the memory and imagination to see the E's clear: the person only needs to shift on the E, guess, imagine which way the E is pointing to see it clear.

When the brain remembers, imagines a clear, dark black letter E and guesses, imagines the E pointing in the correct direction; the brain, eyes relax, the brain directs the eye muscles, eyes to move, shift correct, directly on the letter E and the E is seen clear.

If the person guesses an incorrect direction, the E remains unclear because the eyes, brain are trying to shift on, see an incorrect image, trying to shift, move the eyes along areas of the white page away from the E. See the Pothooks Eyechart on the right.

Read another example of guessing with the memory and imagination; looking at, guessing the # 7 on a bus; chapter 7 - Memory and Imagination.



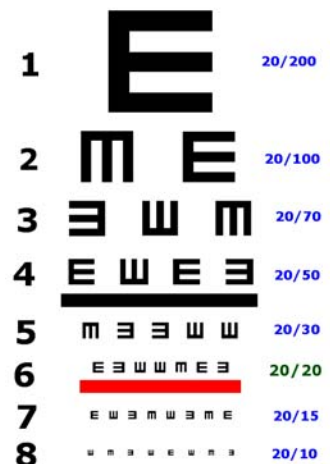
Shift top and bottom, left and right on the E. (Shift dot to dot). Blink.



Flash a letter -  
+Shift on the E for a fraction of a second then +look away from it to another object or close the eyes, palm and remember the E, shift on it in the mind. Or just think any pleasant thoughts with the eyes closed.  
+Open, shift on the E fraction of a second, +Close, repeat...

+Use the memory, imagination: Remember, imagine the E is clear when the eyes are open and when closed. Practice on any objects, at any distance.

Pothooks, Tumbling, Inverted E Eyechart



## 2 - Eyechart Pictures From Ophthalmologist Bates Medical Articles

The pictures below show how strain, squinting, effort to see clear causes the letters on the eyechart to appear unclear.

Relaxation, no effort = the letters are seen clear.



# Throw Away

By W. H. Bates, M. D.

When Mr. Hapgood was in Berlin he was astonished to see that the authorities had taken glasses off the school children. An American is pioneer in the movement



Does your boy squint?

This boy is reading the Snellen test card with normal vision. Note the absence of facial strain.

The same boy straining to see at a distance is producing myopic astigmatism in eyes previously normal.

In this picture the boy is making himself myopic by partly closing his eyes and making conscious effort to read the test card at ten feet.

It is not light that is injurious to the eye. This woman is reading the Snellen test card while the sun is shining into her eye.

**Dr Bates, Emily Lierman, Bates and a Bates Method Student**

## Dr. Bates Directions for Eyecharts. From Better Eyesight Magazine

### BETTER EYESIGHT

October, 1919

#### THE SWINGING CURE

If you see a letter perfectly, you may note that it appears to pulsate, or move slightly in various directions. If your sight is imperfect, the letter will appear to be stationary. The apparent movement is caused by the unconscious shifting of the eye. The lack of movement is due to the fact that the eye stares, or looks too long at one point. This is an invariable symptom of imperfect sight, and may often be relieved by the following method:

Close your eyes and cover them with the palms of the hands so as to exclude all the light, and shift mentally from one side of a black letter to the other. As you do this, the mental picture of the letter will appear to move back and forth in a direction contrary to the imagined movement of the eye. Just so long as you imagine that the letter is moving, or swinging, you will find that you are able to remember it, and the **shorter and more regular the swing, the blacker and more distinct the letter will appear**. If you are able to imagine the letter stationary, which may be difficult, you will find that your memory of it will be much less perfect. Now open your eyes and look first at one side and then at the other of the real letter. If it appears to move in a direction opposite to the movement of the eye, you will find that your vision has improved. If you can imagine the swing of the letter as well with your eyes open as with your eyes closed, as **short**, as **regular** and as **continuous**, your vision will be normal.

#### FUNDAMENTALS OF TREATMENT

By W. H. Bates, M. D.

### BETTER EYESIGHT

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

June, 1921

#### HOW TO DEMONSTRATE THE FUNDAMENTAL PRINCIPLE OF TREATMENT

The object of all the methods used in the treatment of imperfect sight without glasses is to secure rest or relaxation, of the mind first and then of the eyes. Rest always improves the vision. Effort always lowers it. Persons who wish to improve their vision should begin by demonstrating these facts.

- + **Close the eyes and keep them closed for fifteen minutes. Think of nothing particular, or think of something pleasant. When the eyes are opened, it will usually be found that the vision has improved temporarily. If it has not, it will be because, while the eyes were closed, the mind was not at rest.**
- + **One symptom of strain is a twitching of the eyelids which can be seen by an observer and felt by the patient with the fingers. This can usually be corrected if the period of rest is long enough.**
- + **Many persons fail to secure a temporary improvement of vision by closing their eyes because they do not keep them closed long enough. Children will seldom do this unless a grown person stands by and encourages them. Many adults also require supervision.**
- + **To demonstrate that strain lowers the vision, think of something disagreeable—some physical discomfort, or something seen imperfectly. When the eyes are opened, it will be found that the vision has been lowered. Also, stare at one part of a letter on the test card, or try to see the whole letter all alike at one time. This invariably lowers the vision and may cause the letter to disappear.**

ALL errors of refraction and many other eye troubles are cured by rest; but there are many ways of obtaining this rest, and all patients cannot do it in the same way. Sometimes a long succession of patients are helped by the same method, and then will come one who does not respond to it at all.

+ **Closing the Eyes.** — The simplest way to rest the eyes is to close them for a longer or shorter period and think about something agreeable. This is always the first thing that I tell patients to do, and there are very few who are not benefited by it temporarily.

+ **Palming.** — A still greater degree of rest can be obtained by closing and covering the eyes so as to exclude all the light. The mere exclusion of the impressions of sight is often sufficient to produce a large measure of relaxation. In other cases the strain is increased. As a rule, successful palming involves a knowledge of various other means of obtaining relaxation. The mere covering and closing of the eyes is useless unless at the same time mental rest is obtained. When a patient palms perfectly, he sees a field so black that it is impossible to remember, imagine, or see, anything blacker, and when able to do this he is cured. It should be borne in mind, however, that the patient's judgment of what is a perfect black is not to be depended upon.

+ **Central Fixation.** — When the vision is normal the eye sees one part of everything it looks at best and every other part worse in proportion as it is removed from the point of maximum (central) vision. When the vision is imperfect it is invariably found that the eye is trying to see a considerable part of its field of vision equally well at one time. This is a great strain upon the eye and mind, as anyone whose sight is approximately normal can demonstrate by trying to see an appreciable area all alike at one time. At the near-point the attempt to see an area even a quarter of an inch in diameter in this way will produce discomfort and pain. Anything which rests the eye tends to restore the normal power of central fixation. It can also be regained by conscious practice, and this is

sometimes the quickest and easiest way to improve the sight. When the patient becomes conscious that he sees one part of his field of vision better than the rest, it usually becomes possible for him to reduce the area seen best. If he looks from the bottom of the 200 letter to the top, for instance, and sees the part not directly regarded worse than the part fixed, he may become able to do the same with the next line of letters, and thus he may become able to go down the card until he can look from the top to the bottom of the letters on the bottom line and see the part not directly regarded worse. In that case he will be able to read the letters. On the principle that a burnt child dreads the fire, it is a great help to most patients to consciously increase the degree of their eccentric fixation. For when they have produced discomfort or pain by consciously trying to see a large letter, or a whole line of letters, all alike at one time, they unconsciously try to avoid the lower degree of eccentric fixation which has become habitual to them. Most patients, when they become able to reduce the area of their field of maximum vision, are conscious of a feeling of great relief in the eyes and head and even in the whole body. **Since small objects cannot be seen without central fixation, the reading of fine print, when it can be done, (with relaxation, without effort, no squinting, strain) is one of the best of visual exercises, and the dimmer the light in which it can be read and the closer to the eye it can be held the better. (Practice reading fine print in the sunlight for healthy eyes.)**

**+Shifting and Swinging.**—The eye with normal vision never regards a point for more than a fraction of a second, but shifts rapidly from one part of its field to another, thus producing a slight apparent movement, or *swing*, of all objects regarded. The eye with imperfect sight always tries to hold its points of fixation, just as it tries to see with maximum vision a larger area than nature intended it to see. This habit can be corrected by consciously **imitating the unconscious shifting of the normal eye and realizing the swing produced by this movement.** At first a very long shift may be necessary, as from one end of a line of letters to another, in order to produce a swing; but sometimes even this is not sufficient. In such cases patients are asked to hold one hand before the face while moving the head and eyes rapidly from side to side, when they seldom fail to observe an apparent movement of the hand. Some patients are under such a strain, however, that it may be weeks before they are able to do this. After the apparent movement of the hand has been observed, patients **become able to realize the swing resulting from slighter movements of the eye until they are able to look from one side to another of a letter of diamond type and observe that it seems to move in a direction contrary to the movement of the eye.** **A mental picture of a letter can be observed to swing precisely as can a letter on the test card and, as a rule, mental shifting and swinging are easier at first than visual.** The realization of the visual swing can, therefore, be cultivated by the aid of the mental swing. It is also an advantage to have the patient try to look continually at some letter, or part of a letter, and note that it quickly becomes blurred or disappears. When he thus demonstrates that staring lowers the vision he becomes better able to avoid it. **When visual or mental swinging is successful, everything one thinks of appears to have a slight swing.** This I have called the *universal swing*. Most patients get the universal swing very easily. Others have great difficulty. The latter class is hard to cure.

**+Memory.**—When the sight is normal the mind is always perfectly at rest, and when the memory is perfect the mind is also at rest. Therefore it is possible to improve the sight by the use of the memory. **Anything the patient finds is agreeable to remember is a rest to the mind,** but for purposes of practice a small black object, such as a period or a letter of diamond type, is usually most convenient. **The most favorable condition for the exercise of the memory is, usually, with the eyes closed and covered, but by practice it becomes possible to remember equally well with the eyes open.** **When patients are able, with their eyes closed and covered, to remember perfectly a letter of diamond type, it appears, just as it would if they were looking at it with the bodily eyes, to have a slight movement, while the openings appear whiter than the rest of the background. If they are not able to remember it, they are told to shift consciously from one side of the letter to another and to consciously imagine the opening whiter than the rest of the background. When they do this, the letter usually appears to move in a direction contrary to that of the imagined movement of the eye, and they are able to remember it indefinitely. If, on the contrary, they try to fix the attention on one part of the letter, or to think of two or more parts at one time, it soon disappears, demonstrating that it is impossible to think of one point continuously, or to think of two or more points perfectly at one time, just as it is impossible to look at a point continuously, or to see two points perfectly at the same time. Persons with no visual memory are always under a great strain and often suffer from pain and fatigue with no apparent cause. As soon as they become able to form mental pictures, either with the eyes closed or open, their pain and fatigue are relieved.**

**+Imagination.**—Imagination is **closely allied to memory,** for we can imagine only as well as we remember, and in the treatment of imperfect sight the two can scarcely be separated. **Vision is largely a matter of imagination and memory.** And since both imagination and memory are impossible without perfect relaxation, the cultivation of these faculties not only improves the interpretation of the pictures on the retina but improves the pictures themselves. When you imagine that you see a letter on the test card, you actually do see it because it is impossible to relax and imagine the letter perfectly and, at the same time, strain and see it imperfectly. The following method of using the imagination has produced quick results in many cases: The patient is asked to look at the largest letter on the test card at the near point, and is usually able to observe that a small area, about a square inch, appears blacker than the rest, and that when the part of the letter seen worst is covered, part of the exposed area seems blacker than the remainder. When the part seen worst is again covered, the area at maximum blackness is still further reduced. When the part seen best has been reduced to about the size of a letter on the bottom line, the patient is asked to imagine that such a letter occupies this area and is blacker than the rest of the letter. Then he is asked to look at a letter on the bottom line and imagine that it is blacker than the largest letter. Many are able to do this and at once become able to see the letters on the bottom line.

**+Flashing.**—Since it is effort that spoils the sight, many persons with imperfect sight are able, after a period of rest, to **look at an object for a fraction of a second.** If the eyes are closed before the habit of strain reasserts itself, permanent relaxation is sometimes very quickly obtained. This practice I have called *flashing*, and many persons are helped by it who are unable to improve

their sight by other means. The eyes are rested for a few minutes, by closing or palming, and then a letter on the test card, or a letter of diamond type, if the trouble is with near vision, is regarded for a fraction of a second. Then the eyes are immediately closed and the process repeated.

**+Reading Familiar Letters.**—The eye always strains to see unfamiliar objects, and is always relaxed to a greater or lesser degree by looking at familiar objects. Therefore, the reading every day of small familiar letters at the greatest distance at which they can be seen, is a rest to the eye and is sufficient to cure children under twelve who have not worn glasses as well as some older children and adults with minor defects of vision.

In the treatment of imperfect sight these fundamental principles are to a great extent interdependent. They cannot be separated as in the above article. It is impossible, for instance, to produce the illusion of a swing unless one possesses a certain degree of central fixation. That is, one must be able to shift from one point to another and see the point shifted from less distinctly than the one directly regarded. Successful palming is impossible without mental shifting and swinging and the use of the memory and imagination.

All these functions of the visual system work together, are integrated. Practicing, improving one, improves all. Practice improving each one and all are greatly improved. Relax, Blink, Breathe abdominally, Shift, Central Fixation, Memory and Imagination, Oppositional Movement (The Swing), Switching and Shifting on objects at close and far distances with both eyes together, one eye at a time, both eyes together again, shifting on familiar objects/eyechart letters, Flashing, Read Fine Print, Sunning, daily exposure to sunlight, Palming, Good Posture, exercise, Diet ...

## STORIES FROM THE CLINIC

### Better Eyesight Magazine

#### 16: Methods That Have Succeeded

By Emily C. Lierman

The patients who come to our clinic do wonderful things, especially the schoolchildren. We can give each one of them, as a rule, only about five minutes of our time, and yet they are able to carry out the instructions given to them at home, and to get results. This is a great tribute to their patience and intelligence.

Most of the children, and of the grown people as well, are helped by palming, and some wonderful cures have been obtained by this means alone. In my first story for this magazine I told about a little boy named Joey whose left eye had been so injured in an automobile accident that he had only light perception left. It was some time before I could get him to palm regularly, but as soon as he became willing to do it many times a day his sight began to improve rapidly, and he is now completely cured.

**There are some patients, however, who cannot or will not palm.** One of these was a little colored girl, with corkscrew curls, for all the world like Topsy. She had been sent to the clinic because she could not see the writing on the blackboard, and the school nurse told me later that she was very unruly and a great trial to her teacher. She was something of a trial to me too at first, for I could not get her to palm for a moment, and did not know what to do with her. Then I discovered that she had a wonderful memory when she chose to use it, and I resolved to treat her by the aid of this faculty. I was able to improve her sight considerably, and the very next day her teacher noticed such a change in her behavior that on the next clinic day the school nurse came with her to see what I had done. I then asked her to remember, with closed eyes, a letter on the test card grey instead of black. She could not stand still a minute while she did so, and when she opened her eyes there was no improvement in her vision. Then I asked her to remember the blue beads she had around her neck. She did so for five minutes, standing perfectly still all the time, and when she opened her eyes she read an extra line on the test card. I had her do this again, and again she read an extra line. The nurse was thrilled by this demonstration of the fact that **perfect memory improves the sight and relieves nervousness.**

Recently a poor young man called at our magazine office and asked if Dr. Bates had written a book about the treatment of the eyes. When told that there was such a book, he bought it and also subscribed for the magazine. His sister was being treated at the clinic, he said, and he wished to take off his glasses as she had done. Later he came to the clinic, as he lives in the hospital district. I found that he could not read newspaper print without his glasses, while his distant vision was 12/70, both eyes. This was about six months ago. He now reads diamond type, and last week his sister asked Dr. Bates if he had finer print, as her brother found the diamond type so easy that he wanted something smaller. Dr. Bates gave her a page from a photographic reduction of the Bible, and he reads this also without any trouble. The methods he used were **swinging and flashing, together with palming.**

The influence of this cure has been extensive and is still going on. The patient loaned the book to a myopic youth in his office, and by means of palming he was able to improve his sight so that now he dispenses with glasses for long periods. An elderly man in the same office thought the palming a very absurd practice but, having borrowed the book, he started shifting and flashing at lunch time, just to pass the time. He now does much of his work without glasses.

## HOW I IMPROVED MY EYESIGHT

By PAMELA SPEYER

*This patient was wearing when first seen the following glasses: each eye, concave 5.00 D.S. combined with concave 1.00 D.C. A number of competent men had said that her myopia was progressive, and that her vision was certain to become very imperfect even with glasses. They all insisted that she must wear glasses constantly. Yet after she had discarded them her vision improved in two days from 6/200 to 20/100.*

I have always been near-sighted. When I was six years old, my father took me to a famous oculist in London, and he prescribed and fitted me with my first glasses. With these lenses I was able to distinguish things at a distance which before I had not been able to see. I found that I could read or see objects at close range just as well without the glasses. The only difference that they made to my sight in this case was that print appeared smaller and less black.

Every year stronger lenses were given to me, and I visited several oculists in England and America, in the hope of improvement. When I was fifteen an oculist told me that my eyesight, instead of improving each year as I had hoped, would gradually become worse. By this time I was wearing glasses all the time.

Then, quite by chance, my father heard of Dr. Bates through a friend whose eyesight had been cured by him. I was taken there at once. The first thing Dr. Bates did was to take away my glasses. I sat down in a chair, opposite which was a Snellen test card, fifteen feet away. I could not see the largest letter, a "C" about four inches by three, which people with normal vision are supposed to read at two hundred feet. He brought the card five feet nearer and then I read the "C." It appeared very blurred and indistinct.

The smaller letters were so blurred that I could not see them at all.

After I had learned to "palm," I learned to "swing." The reason I strained my eyes so when looking at the card was that I stared at one place. So by **imagining the letter was swinging like a pendulum, I moved my eyes instead of staring** as I had done before. **At first the swing was a long one, but after practicing for some weeks, I began getting it shorter until it was only half an inch on each side of the letter. The short swing was more difficult to do than the long one, but it helped more in the end.**

### Flashing

Then I learned to "flash." I looked at a small letter at fifteen feet distance and could not read it. The longer I looked the worse it grew. So by **closing my eyes, remembering the swing for a few seconds, I just glanced at the letter and closing my eyes at once, I saw the letter in a flash.**

All these things must be practiced every day, and even now I have to "palm" every morning and night.

**Palming, swinging and flashing** were the three fundamentals. As soon as they were mastered only practice remained. I have now been going to Dr. Bates for over a year, and my eyesight is almost cured. I often have flashes of perfect sight. Dr. Bates has certainly helped me in a remarkable degree, more indeed than I ever thought possible when I first went to him wearing strong glasses.

### Palming



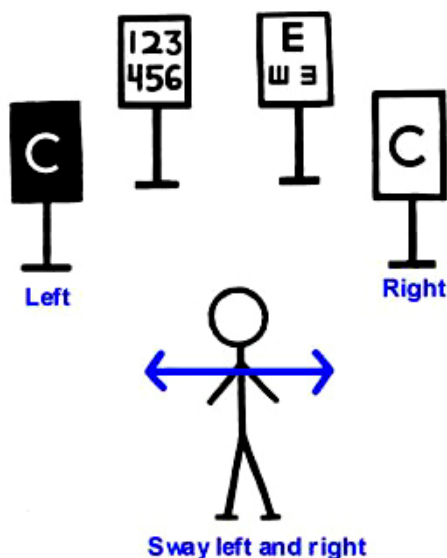
### Treatment steps

- +Palm
- +Swing
- +Shift and see **oppositional movement. Blink, relax.**
- +Long Swing
- +Sway and shorter sway.
- +Shift on a small or fine print letter and see a small, very short swing, (small **oppositional movement**).
- + 'Flash' letters, objects for a fraction of a second: Shift on a letter for a fraction of a second, then palm.
- +Close the eyes and remember, imagine the letter clear and shift on it, see the swing in the mind.



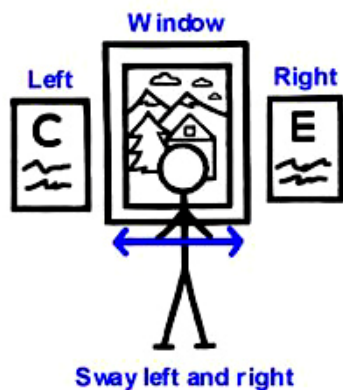
Palm and remember, imagine a flower, its color, white cloud with sun shining behind it, blue sky and any pleasant objects, scenery that is easily remembered clear, perfect.

See objects clear, in color, motion: wind blowing green grass, pink, blue, purple, red, orange... flowers, yellow black bee with golden pollen on its legs, rainbow colors in its clear wings flying about the garden.



Sway left and right

Sway left and right in front of 4 eye charts. Blink. Notice the charts appear to move past in the opposite direction to the movement of the body. (More movement is seen with the charts at close distances before 20 ft.) Shift without effort on a letter on the charts for a second, fraction of a second when swaying in the direction of a chart. No effort to see. No staring. Keep moving. Relax. Do the same with the Long Swing. Swing right and 'shift for a fraction of a second' 'flash' on the letter C on the chart on the right. Then swing left and 'flash' the letter C on the chart on the left. Then, flash a number on the card on the left when moving left and flash an inverted E on the E card when moving right. Practice flashing, seeing clear smaller letters at various distances.



Sway left and right

Charts can also be placed on the left and right sides of an open window. Sway and swing left and right and shift, flash the letters on the left and right charts as described above. Shift on distant objects outside the window. Practice day and night.



## For Pilots - Aviators - Better Eyesight Magazine

Many articles on pilot's vision are posted in Dr. Bates Better Eyesight Magazines. Do word search in the Adobe Reader Better Eyesight Magazine PDF; Aviators, Pilots, Air Force, Military, Marines, Navy, Army, War, Soldiers...

Here is one of the Pilots Articles from Better Eyesight Magazine;

### Better Eyesight

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

September 1928

#### EYESTRAIN

The eyes of all people with imperfect sight are under a strain. This is a truth. Most people believe that during sleep the eyes are at rest and that it is impossible to strain the eyes while sound asleep. This, however, is not true. Persons who have good sight in the daytime under favorable conditions may strain their eyes during sleep. Many people awake in the morning suffering pain in the eyes or head. Often the eyes are very much fatigued and have a feeling of discomfort. There may be also a feeling of nervous tension from the eyestrain, or there may be a feeling as of sand in the eyes. At times all parts of the eye may be suffering from inflammation. The vision is sometimes lowered for several hours whereupon it begins to improve until it becomes as good as it was before the person retired the night before. Many people become alarmed and seek the services of some eye doctor. Usually the doctor or doctors consulted prescribe glasses which very rarely give more than imperfect or temporary relief.

There are various methods of correcting eyestrain occurring during sleep. Palming is very helpful even when practiced for a short time. A half an hour is often sufficient to relieve most if not all of the symptoms. In some cases the long swing, practiced before retiring, is sufficient to bring about temporary or permanent benefit. Blinking and shifting are also helpful. Good results have been obtained by practicing a perfect memory or imagination of one small letter of the Snellen test card alternately with the eyes open and closed. A number of patients were benefited and usually cured by remembering pleasant things perfectly.

#### AVIATORS' EYES

By W. H. Bates, M.D.

AVIATION is becoming more popular than ever before. The writer has treated many aviators who had, within a few months, acquired trouble with their eyes which made it dangerous for them to continue to fly. During the war a Major, an Aviator in the Army, consulted me about his eyes. His principle trouble was dizziness. He was wearing glasses for the correction of a slight astigmatism. The glasses did not relieve the dizziness. At this time a large number of aviators had been killed by falls.

The history of this aviator was very interesting and valuable. He was positive that a number of years previously when he began to practice flying that his sight was normal - 20/20 with each eye or with both. After a few years he noticed that his sight was impaired and that he had attacks of dizziness which did not last long in the beginning. These attacks of dizziness would come without warning while he was flying about one thousand or more feet above the ground. While he was conscious of the dizziness, he noted that his machine (plane) started to fall and continued falling until the dizziness stopped. It was some months before he realized that with every attack of dizziness the machine fell a greater distance, and he feared that these spells would ultimately cause his death.

Like most Army and Navy men, the Major did as he was told and was cured by me. This is the way it was done. I tested his eyes with the ophthalmoscope and retinoscope and found no disease of his eyes. The retinoscope revealed a small amount of astigmatism in each eye. His vision for the test card was 20/30. When he closed his eyes and rested them, the astigmatism became less and his sight for the test card became normal - 20/20. This was accomplished in about an hour. The improvement was only temporary, however, and he was given advice for treatment at home. A large test card was given him with directions to read it with each eye separately at twenty feet. He was directed to rest his eyes often by closing them. It was suggested to him that he look at one letter which he remembered better with his eyes closed than he imagined or saw it with his eyes open. By repetition, his vision for the known letter improved and his sight for unknown letters and other objects improved until his vision became 25/10. He was under treatment for about a month and he was seen at irregular intervals during that time. Since that time I have not heard from him personally.

Other aviators have been benefited by the same treatment. There is a right way and there is a wrong way to use the eyes when controlling a flying machine. The time required to do the wrong thing is just as long as the time required to do the right thing. The aviator can also demonstrate that an imperfect memory, imagination or sight is more difficult than a perfect memory, imagination or sight.

For example, a small letter "o" can be remembered imperfectly on one of the lines of small letters of the Snellen test card, but a stare or strain to see it with a white center as white as snow may require much effort, time and trouble. The imperfect whiteness of the letter soon disappears while its blackness turns to a shade of dark or light gray, all covered by a blurred cloud. The concentration, the effort to see, brings on discomfort, fatigue, pain, dizziness and other nervous symptoms which are all difficult to remember, imagine or feel. The memory, imagination or sight can only be demonstrated easily when exercised without strain. The successful pilot when at his best is always doing the right thing.

When riding in a fast moving train, the telegraph poles, although fastened to the ground, appear to move in the opposite direction. But any effort to stop this movement brings on a strain which may cause much pain, dizziness, fatigue or other nervous discomfort. The Major, who recognized the bad effects of dizziness from imperfect sight, believed that the dizziness, if sufficient, could cause fatal accidents when flying. He became able consciously to produce dizziness by eyestrain or by an effort to improve his vision.

He was taught to imagine the floor to be moving when he walked about his rooms. Swaying his head and eyes from side to side enabled him to imagine the floor to be always moving. When he steered his plane to the right, all objects seen appeared to move to the left. When he moved to the left all objects seen appeared to move to the right. He was able to lengthen the apparent movement of stationary objects. The wider the movement, the less was the sight improved, while a shorter movement of the eyes or head was followed by a greater improvement.

It was difficult for him to demonstrate that perfect sight can only be obtained by rest and prevented by an effort. But when he had learned that it was a truth without an exception he soon became able to demonstrate the facts. He was encouraged to improve his vision by using various or all parts of his machine as objects for testing and improving his sight. The more successful he was in improving his memory for objects, the better was the vision. We can only remember perfectly what we see perfectly; we can only imagine perfectly what we remember perfectly; we can only see perfectly what we imagine perfectly.

The time required for a cure varies with individuals. The eyes of some aviators may be under a greater strain than that of others.

The aviator should demonstrate that shifting the eyes or moving the eyes from one small part of his plane to other objects is restful and that his sight is always improved by resting his eyes. Blinking or closing the eyes and opening them quickly is also a rest. He should also demonstrate that closing the eyes for a few seconds or longer and then opening them for a shorter time is a benefit to the sight. Palming or covering the closed eyes with the palm of one or both hands when done right always improves the vision. Blinking, shifting, or palming can be practiced before entering the plane and so accidents may often be avoided.

While attacks of dizziness are a frequent cause of accidents, many of them fatal, there are numerous other causes which are just as serious or important. Many fliers of airplanes seldom have accidents. What is the secret of their success? It is due to their control at all times in all places.

Control of what?

The answer is: Control of the mind, control of the eyes and of all the nerves generally.

When the efficiency of the mind is at its maximum, it is at rest. Nothing is done consciously or unconsciously. It was a shock to the writer to discover with the aid of the retinoscope that the greatest strain of the body occurred during sleep. Strain is always accompanied by a loss of mental control when things go wrong. Accidents, fatal accidents, always mean a loss of mental control. The fact should be demonstrated. It should also be demonstrated that it is more difficult to fail than to succeed.

"Lindy" (Charles Lindbergh – Pilot) could not have crossed the Atlantic Ocean, a 3,000 mile journey, by making a constant effort to obtain nervous control. The effort would have caused fatigue, and no man can have control of his nerves by using some form of effort. Dizziness is caused by prolonged effort and no man could fly very far when dizzy. The eyesight of even the best of us would become imperfect in a few minutes or less. Now let me ask how many of the best aviators could be efficient if their sight should become imperfect?

Control is necessary.

How can it be obtained? Very easily. First demonstrate that doing the wrong thing - like staring, straining or making an effort to remember, imagine or see - requires an effort, while resting the eyes or mind is easy and requires no effort.

It is a common experience for many people to fail to remember a person's name. An effort to remember it always fails but if they rest their minds by thinking of something else the name comes to them without their volition. A perfect memory can be obtained by practice. Perfect mental control comes or is manifest when the memory is perfect. Practice is important and very necessary. One may see and remember familiar or well known objects with the eyes open but better with the eyes closed. By alternating, the memory with the eyes open improves until it becomes as good as with the eyes closed. This means mental control of the mind, eyes, and all the nerves of the body.

The imagination can also be improved by practice. For example, if a well known or familiar letter of a sign or print on a card can be imagined more clearly than it really is, the vision of all parts of the letter is improved as well as the vision for other objects which were not seen before. Imagining the letter alternately with the eyes open and closed is a benefit to the imagination and the memory as well as to the sight. The aviator can improve his control by improving his memory, imagination, and sight, while flying. It is not necessary for him to practice on letters or other objects several miles away. He can practice successfully, more or less continuously, on the face of his compass or some other part of his machine. Finally he should remember that perfect control can only be obtained by rest and not by any effort whatever.

20/200 at 200 Feet

**E**

20/100

**F**

**P**

20/70

**T**

**O**

**Z**

20/60

**P D C**

20/50

**L P E D**

20/40

**P E C F D**

20/30

**E D F C Z P**

20/25

**F E L O P Z D**

20/20 Vision at 20 Feet

20/20 **D E F P O T E C** 

20/15

L E F O D P C T

20/13

F D P L T C E O

20/10

P E Z O L C F T D

20/8

E D L T O Z F C P

20/6

L P C F E T O D Z

20/5

T F D O P Z L E C

Very Clear Vision, Small Print Clear at 20 Feet

Z C T L O P D F E

20/200

E

F P

T O Z

L P E D

P E C F D

E D F C Z P

FELOPZD

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DEFPOTEC

LEFODPCT

FDP LTC EO

PEZOLCFTD

Big C Chart  
From Better  
Eyesight  
Magazine

C

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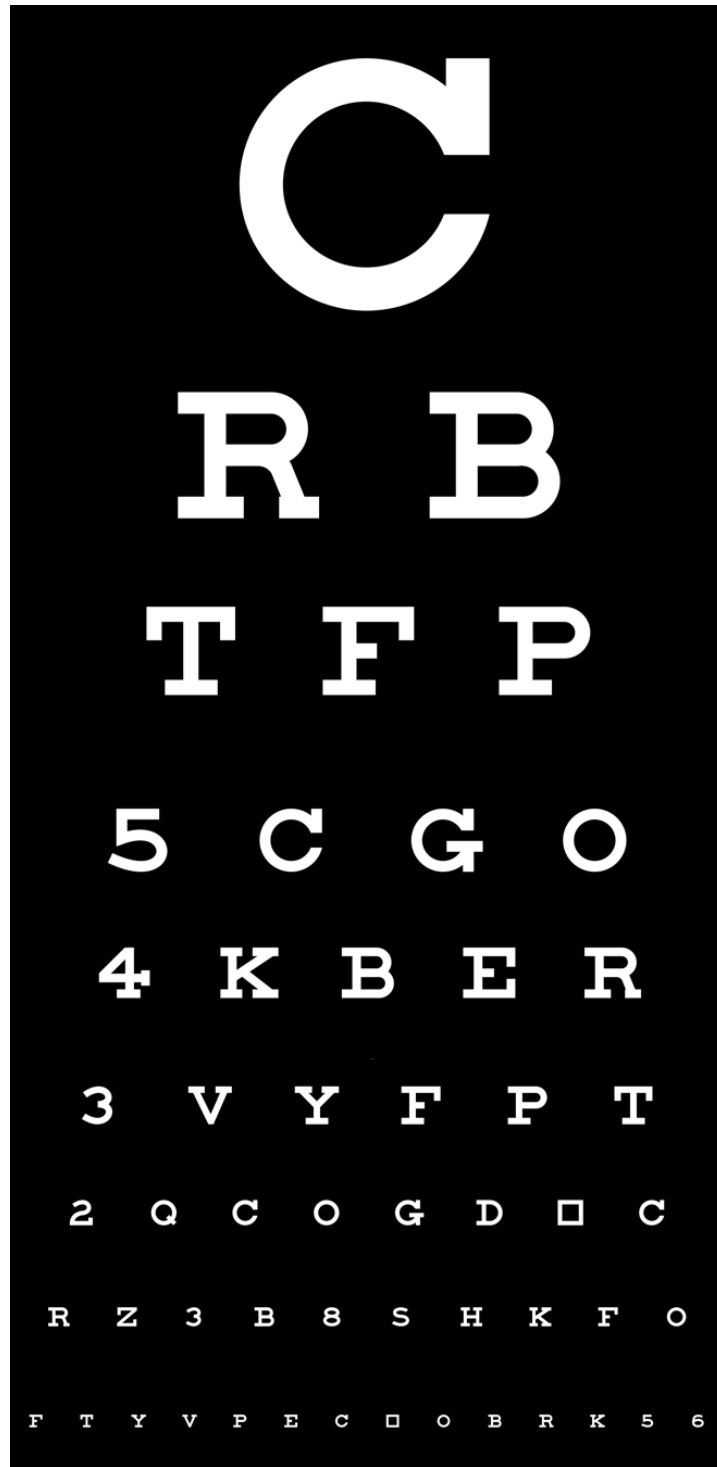
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R Z 3 B 8 S H K F O

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White Print Relaxes the Mind and Eyes



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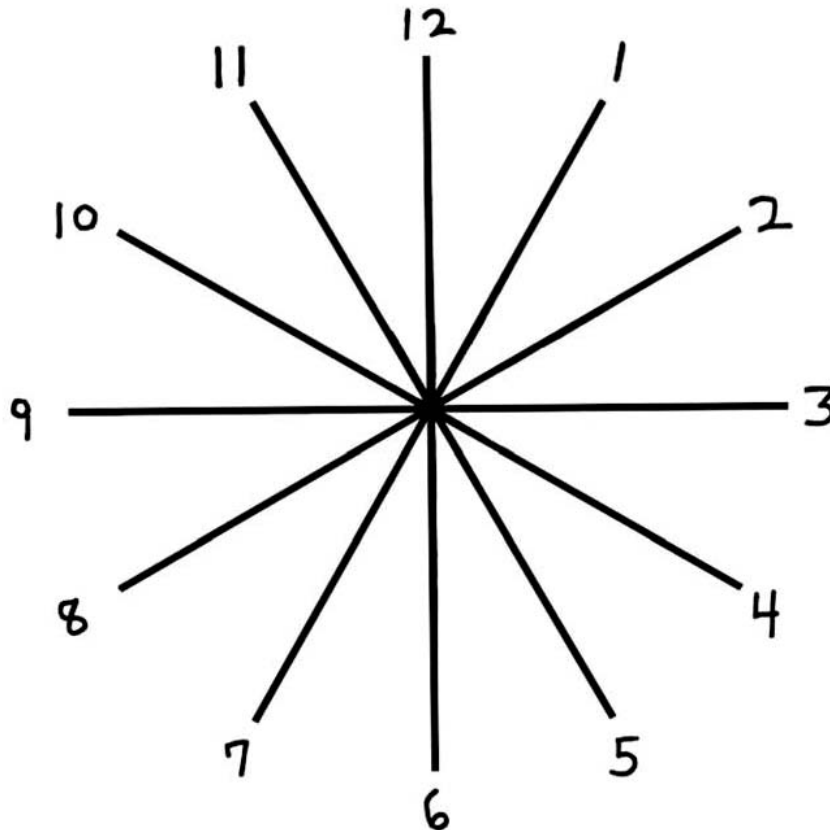




# Astigmatism Removal

## Natural Eyesight Improvement for Clear Vision

Natural Eyesight Improvement astigmatism removal wheel



Shift on the lines;

Left and right - 9 to 3, 3 to 9

Up and down - 12 to 6, 6 to 12

Diagonally - 8 to 2, 2 to 8, 10 to 4, 4 to 10, 5 to 11, 7 to 1

Shift, trace on the lines in any direction; center to left or right, up, down, diagonally... and back to center.

Move the eyes/center of the visual field along the lines and remember, imagine, see the lines dark black and perfectly clear.

Central fixation; see one small part of a line clearest at a time in the center of the visual field and move the eyes/center of the visual field continually, easy, relaxed along the line from part to part.

Blink. breathe slow, abdominally, relax.

Astigmatism Videos for this next training Lesson:

<http://www.youtube.com/watch?v=W6YLe-Wgpv8>

<http://www.youtube.com/watch?v=UUF02OdGFCg>

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  - + [Natural Eyesight Improvement Training Book](#) with 100+ Color Pictures. Less reading: Easy to learn steps-Read the short directions on the pictures to quickly learn, apply a treatment, activity for Fast Vision Improvement. (All of Dr. Bates, Clark Night's Kindle, PDF & Paperback books are in this E-Book.)
  - + [Better Eyesight Magazine](#) by Ophthalmologist William H. Bates - (Unedited, Full Set - 132 Magazine Issues - 11 Years-July, 1919 to June, 1930.) Illustrated with 500 Pictures and additional, up to date Modern Natural Eyesight Improvement Training.
  - + [Original Better Eyesight Magazine](#) by Ophthalmologist William H. Bates - [Photo copy of all his Original Antique Magazine Pages](#) in the 1900's Print. (Unedited, Full Set 132 Magazine Issues - 11 Years-July, 1919 to June, 1930.) A History Book. Learn Natural Eyesight Improvement Treatments directly from the Original Eye Doctor that discovered and practiced this effective, safe, natural method! Magazines & Method Hidden from the public by eye surgeons, Optometrists, optical businesses for over 100 years because this method works and frees the patient from the need to purchase eyeglasses, drugs, unnecessary eye surgery. Yes, it can and has reversed cataracts and other eye conditions!
  - + [The Cure of Imperfect Sight by Treatment Without Glasses](#) by Dr. Bates (Photo Copy of the Original Antique Book Pages) with Pictures. Dr. Bates First, Original Book. (Text version with Modern Treatments included.) 2nd Printing Title: Perfect Sight Without Glasses.
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  - + [Use Your Own Eyes](#) by Dr. William B. MacCracken M.D. (Trained with Dr. Bates.)
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