

## Shifting, Central-Fixation and Avoiding Staring

Every shift of the eyes causes a slight blur. It's not seen when the vision is clear, mind, eyes relaxed. But; when the eye needs vision improvement, is tense; a shift from one object to another or part of an object to another part or from one distance to another can show a temporary blur as the eyes, muscles readjust, recalibrate to-for the new object, distance. Lens adjustment also joins in.

The retina's adjustment to light, dark also affects the eyesight. Daily sunlight improves this function along with good nutrition, bilberry berries, spinach... Visual purple in the eyes retina functions when light turns to dark, dark to light. Alternating sunning and palming improves it's function.

Visual purple, night vision; <http://cleareyesight-batesmethod.info/id19.html>  
Natural Vision teacher Thomas Quackenbush describes it well; <http://www.amazon.com/Relearning-See-Imp...1556433417> Type in visual purple in the search inside tool.

Staring lowers the clarity of vision. The retina is less responsive, less energy signals moving, less in the cones, rods, nerves and brain when the eyes stare, try to see. The whole retina becomes less active. The part of the retina that's getting the light rays from the part of the object the eyes are staring at; no light moving on that part (fovea and all parts) = the retina is less active, and that part (fovea) more so. The retina has to spend more time 'reactivating, responding' when the eyes move again. I read about some kind of too much 'immobile, concentrated' light that occurs in the retina when the eyes stare. It shuts certain functions off until movement recurs. Cells in the cones, rods, ect... burning out, then new ones replenishing, replacing the old. See Dr. Ingham's experiment.

The book listed in this PDF is written by Doctor Emery C. Ingham. Her mother, Doctor Clara Ingham trained directly with Dr. Bates. She is mentioned in Dr. Bates Better Eyesight Magazine;

*Dr. Ingham, who also practices by Dr. Bates' method, is going back to Oregon. She will have access to the orphanage, and expects to start the system there free of charge. Dr. Ingham is a true member of the League. She not only gives her time, but her valuable experience in curing defective eyesight. She is most enthusiastic and we hope to hear very favorable results of her work in Oregon, and that a BETTER EYESIGHT LEAGUE is established there.*

### Cases Benefited

By DR. CLARA C. INGHAM, Portland, Oregon

*CATARACT: A lady sixty-five. Vision of right eye 20/200; left eye 20/100. Unable to do any reading. Six months treatment gives vision 20/20. Can read diamond type print.*

*STRABISMUS: Child of ten years. Vision 20/40. After eight months' treatment, vision is normal and eye straight. College student afflicted from childhood with extreme strabismus and oscillation. One of the most difficult cases for correction that ever entered my office. Sight in strabismic eye 2/200; in the straight eye 20/50. At the present time the oscillation has practically ceased while the strabismic eye is straight much of the time. Patient still comes about twice a week and while not yet normal, the vision of both eyes is greatly improved. This young man's mother is a teacher in the schools, and her son's restoration has done much to place Dr. Bates' Method before the schools.*

*PAIN: Patient a man of thirty-two. Vision 10/200. Severe pain in eyeballs and temples. Eye troubles from childhood. Says he was never conscious of absolute freedom from pain. After a year 's treatment, is one of our greatest enthusiasts for good eyesight. He is an instructor in a college and will gladly spread the gospel.*

*NEAR-SIGHTEDNESS: Grammar school girl about fourteen, near-sighted from straining to see the blackboard. Vision in right eye 10/100; in left eye 10/70. After two months normal sight, and has learned how to protect herself against eye strain in school, so has no fear of a recurrence of the trouble.*

*ACUTE GLAUCOMA in right eye, the left eye having been completely lost its sight by the same disease more than a year previous. The right eye responded very readily to treatment, as has the left also, though seemingly past help when the patient first came.*

Book title; Seeing Without Glasses by Dr. Emery C. Ingham. Pictures of Dr. Emery Ingham's book show how to shift, central-fixation and describes the effect of staring.



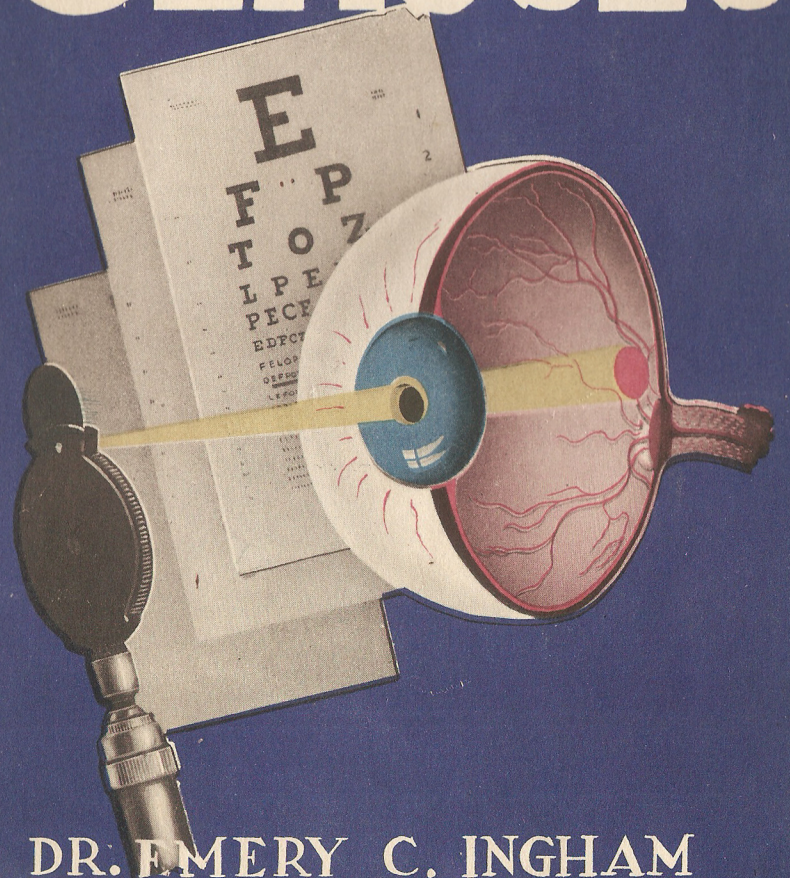
# SEEING WITHOUT GLASSES

DR EMERY C. INGHAM

INGHAM

SEEING WITHOUT GLASSES

# SEEING WITHOUT GLASSES



DR. EMERY C. INGHAM



*The mission of this book is to teach the development of eyesight. Its slogan is:*

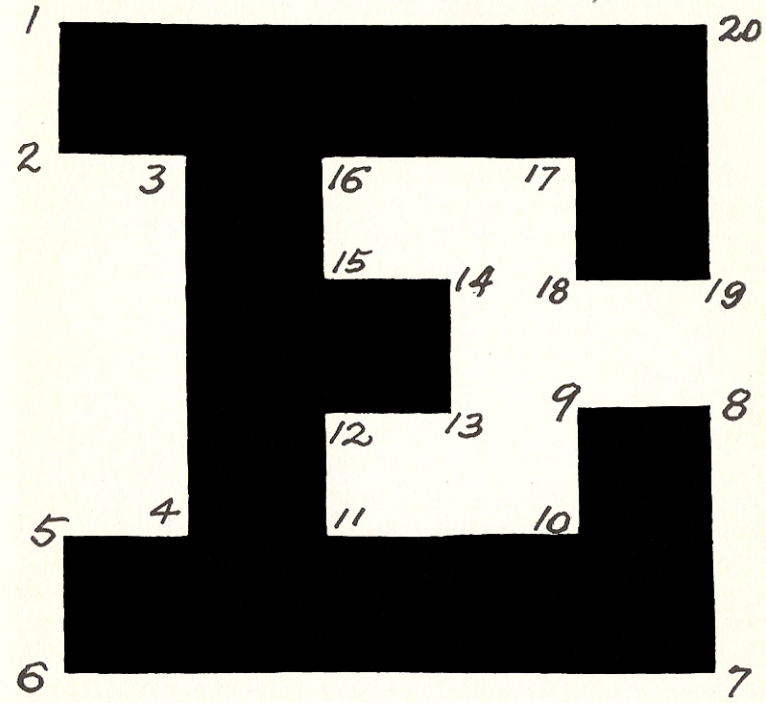
*"Throw away your glasses  
and see with your eyes."*

*I am indebted for much of its contents to my mother, Dr. Clara Ingham, who, more than twenty years ago, was a student in the late Dr. W. H. Bates' school of "Perfect Sight Without Glasses." The fundamental truths pertaining to normal vision, revealed by Dr. Bates, have kept her sight from dimming, even though she has now passed her seventieth birthday.*

### CENTRAL FIXATION

Central fixation is the ability and the natural action of a NORMAL EYE to see, clearly and in detail, only one small point of any one object at any one time. To see the entire object, the eye must be moved around and over the object. With normal vision the rapid shifting of the eye over the object observed is so fast that you are not actually conscious of the fact that you are seeing only one small point at a time. In other words, suppose you look at this letter "E." You think you see the entire letter at one time, but you do not. Normal eyes should move about five times in order to recognize it as an "E." This is true, no matter how fast you think you see the letter. As the vision becomes defective, one of the first things that is noticed is the lack of "central fixation." The eyes begin to see the entire object at one time. The greater the space observed, the greater the strain.

To assure normal eyesight, the natural ability of central fixation must be developed. The eyes must be trained to see clearly only that point upon which it is focused and then to immediately shift to another central point, even if the second point is only a small fraction of an inch away. Look at the letter "E" on the opposite page, and feel the eyes travel over the letter from the top and around the lines to the bottom and on around the "E" to the top again. The smaller the part of the letter that you are able to feel your eyes see at any one period, the better your vision. If you can feel your eyes look at the top and then at the bottom of the small letter "E" and then as your eyes move rapidly over the letter, feel the eyes looking across the thickness of the lines making the "E," you have a



very good central fixation and one of the requirements for normal vision.

Not being able to demonstrate central fixation means you do not have normal control of the eyes, and, if your eyesight is not defective at this time, you will surely develop defective vision at some time in the near future.

Practice central fixation now, and master it. In central fixation the line of most acute vision must shift rapidly from point to point on the object being observed, and this point is seen clearest when you look at it. See for a fraction of a second the point looked at clearest, and then shift to another point. If the eyes hold for more than a fraction of a second on any one single point, you have lost central fixation and created an eye strain. The smaller the point seen and the greater the rapidity of the shift, the better the vision.

The eyes should be trained to see only one small part of the letter looked at. This training of the eye is sometimes difficult, because whenever you look at an object, you see the object as you always have been seeing it—without central fixation. Habits are hard to break, and habits of seeing are especially so. For this reason you must practice central fixation, with your eyes closed, over and over again, time after time, until you establish the habit of your eyes seeing with central fixation. The eyes are trained while they are closed, because, when the lids are shut and you mentally picture an object, you must see it in your mind one point at a time. If you try to imagine the object all at one time, the mental picture fades immediately. It is impossible to have other than central fixation with your eyes closed. The mind must train the eyes when they are closed, and this training must be so complete that when you look up, your eyes follow the normal process of central fixation.

The letter "E" is the ideal letter to practice with and train the eyes. Let the eyes follow around the edges of the letter, counting the corners as the eyes move from corner to corner around the "E." Do this several times until the picture of the "E" is definitely in the mind. Now close and cover the eyes and mentally picture the "E." Let the eyes travel over and around the "E" with the eyes closed, just as with them open. Count the corners of the letter as the eyes move around the "E" with the lids closed. As the eyes move around and over the "E," notice that there is a definite feeling of movement, and that if the eyes stop moving, the mental picture of the "E" fades immediately. As you practice with your eyes closed, try to keep the mental picture of the letter "E" the same size as the letter "E" in the cut. Notice that if the eyes are allowed to stop shifting from point to point on the letter, the mental picture of the "E" fades and is lost. This demonstrates to you the fact that you can not imagine any object or picture unless you practice central fixation and keep your eyes shifting from point to point.

After a bit of practice with counting the corners of the large letter "E" with the eyes closed, glance up at the "E." You will notice that now your eyes try to keep moving as you look at the letter. They seem to move from the top to the bottom and around from point to point on the letter just as they did when closed.

Turn to the Snellen Test Chart in the back of the book. With the eyes closed, follow around the corners of a smaller letter "E." Make the eyes move from corner to corner just as you did on the larger letter "E," keeping the "E" as small as it appears on the test chart. After this letter becomes easy to follow with your eyes closed and your eyes continue to move on the smaller letter "E" just the same as

they continued to move around the large "E" when you opened your eyes and glanced up, practice the same exercise on a still smaller letter. Continue this exercise of imagining the eyes moving around the corners of the smaller letters while closed and then glancing up at the letter, keeping your eyes moving. Alternately move your eyes around the letters, first closed and then open, until your eyes are able to move over the smallest letters on the chart with ease. Continue this exercise until you are able to feel your eyes move, when closed, around the smallest letter on the chart and then are able to feel the eyes move around and over the letter when you look up. In other words, you train the eyes when closed to move over the smallest part of the letters and then glance up and keep your eyes moving over the smallest part of the letter with the eyes open. Practice this exercise over and over again until your eyes move with ease around any letter when closed and you are able to imagine the letter the same size when you see it with your eyes open. As you practice this exercise notice how free and easy the eyes feel and how any strain you may have had has entirely disappeared. Notice how much easier it is to see when the eyes are open after you have practiced moving them around the very small letters when they are closed.

Always keep your eyes moving while seeing any object and train the eyes to see only one point of the object perfectly at any one time. In order to see the whole object, train your eyes to shift rapidly over the entire object.

I know an engraver who is able to feel his eyes move over the width of a line. He is able to see one side of his very fine engraving lines at a time. He distinctly feels his eyes move across this very small width of space. Eyes were made to use and use correctly. The more you use your eyes as they should

be used, the better your eyesight will be. This engraver has trained his eyes to shift and move according to the natural processes of seeing, and, as a result, he has very fine vision for both distance and reading at past the age of sixty.

To hold your eyes still and try to see a letter or an object continually without shifting the eyes around the object or shifting them across the letter or object, you produce strain, and strain results in fading vision. Dodge your good vision. Just as soon as you see any one point of an object, immediately shift your eyes to another point on the object. If you are unable to feel your eyes move across the object and see only one point at a time, consciously shift entirely away and then glance back. Shift your eyes a foot or so away and then bring your eyes back to the first point. Continue shifting away and back at the point being observed but looking a shorter distance each time until you can shift just a fraction of an inch away and back again.

Never look at any object long enough for it to fade out. Shift the point of vision continually. When you see any one point, shift and move your eyes immediately to another point. Dodge your good vision and make your eyes continually move and shift. Always remember the smaller the point observed at any one time and the more rapid the shift from point to point, the more acute the vision and the greater comfort in seeing.

Now you say "Do normal eyes do this?" The answer is "Yes." Normal eyes continually shift and change focus. If they did not, the vision would soon become defective. Normal eyes shift and change focus so rapidly and continually that you are not in the least aware of the change. Normal eyes can not remain normal unless they continually shift and move. If the eyes are normal and are forced to see without

shifting and to stare, they will soon feel drawn and pulled. If staring is continued, the vision will fade, and the eyes will ache.

Central fixation is seeing any one point at any one time and then immediately shifting to another point, seeing the second point, and then back to the first point. The smaller the point seen and the more rapid the shift from point to point the better the vision.

Start practicing central fixation right now and practice it continually on the chairs, the tables, the walls, pictures, letters, and words in this book—in fact, on everything the eyes see. Practice central fixation continuously. *Central fixation is a fundamental truth of normal eyesight and necessary for normal vision.*

## SHIFTING

Closely associated with central fixation is shifting of the line of vision from one point to another on the object being observed, and this is also one of the fundamental truths of normal eyesight. Normal eyes are continually moving and shifting over the object being observed. Normal eyes shift and move continually even when closed. The eyes are always shifting and moving over the mental pictures as they flash through the mind. You actually see these pictures in your mind's eye, and your eyes continually shift and move over the object of your imagination while at the same time you are observing only one point of the object best, demonstrating central fixation.

Try this now. Close the eyes and think of a horse. Notice how the mind's eye shifts from one part of the horse to the other. First you are thinking of any horse, then some particular horse. Now you think of his head, now of his tail. Each portion remains clear in your vision, and then fades as the eyes shift across the mind picture to another portion of the horse. Notice that you are unable to stop the eyes on one single point of the mental picture without shifting. The eyes must continually shift or the mental picture is lost. This is an absolutely normal state of affairs. The eyes should continually shift the same way when they observe any object. They should continually shift over the object observed. The line of vision should move freely and easily over everything seen. In fact, the more freely and the more easily the eyes move, the better the vision and the greater the comfort experienced in seeing.

## STRAIN

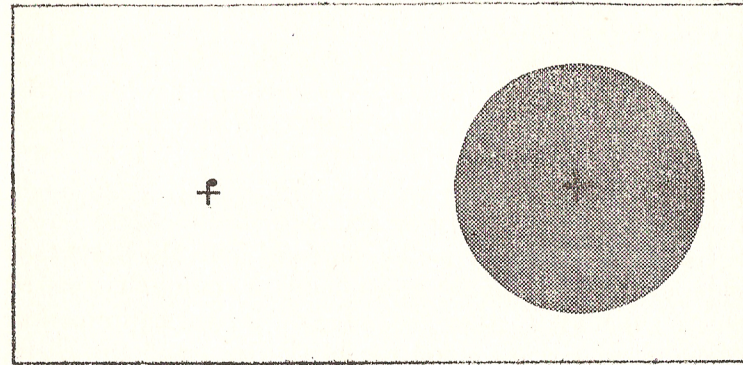
"Floating Flies," "Floating Specks," "Threads," are the names called spots that sometimes drift before the eyes. Often a person with seemingly perfect eyesight will see specks or spots floating before the eyes. These specks seem to be forever drifting in the air just out of the line of vision and moving slowly away as the eyes are turned, keeping always before the eyes but not directly in front, and while plainly seen, the eyes are not able to focus on the speck. These floating spots before the eyes may assume the appearance of threads, bands, dots, or even strings of dots. These spots may vary greatly in size, shape, and color from day to day, and are particularly annoying on bright days or when looking at shiny objects.

Floating specks are due to eyestrain, and they may be the fore-runner of more serious conditions. The floating specks should not be confused with the fixed opacities that may be in the eye, such as those due to injury or cataract formation. These spots in the eye always stay in one position with respect to the line of vision, and do not shift around or drift as do the floating specks.

The more you try to see the spots and strain the eyes to determine just what they are, the more the spots will bother, for these specks and spots are due to eye strain. Relax the eyes and eliminate the strain as described under palming and the spots will disappear and will not again appear until you have again strained the eyes. These spots are, in themselves, not an eye condition to worry about, but they are an

indication that the eyes are under a strain and should be given a course of the exercises described in this book.

Persistent return of the floating specks after relaxation of the eyes may indicate an error in diet, and the chapter on diet for the eyes should be read and carefully followed. *Never underestimate eye trouble, for you have only one pair of eyes.* When these fail you, you are robbed of Nature's most wonderful gift.





## TO DEMONSTRATE STRAIN

The eyes are strained by staring and by holding them perfectly still while looking at an object. Lack of motion of the eyes produces strain, and strain tires the eyes. This is very easily demonstrated by using the illustration on page 69, a cross in a field of gray. This demonstration of strain is entirely harmless to the eyes and may be tried by anyone. All that is necessary is to stare as directed and witness the effect of your stare.

Stare at the tiny black cross in the center of the gray circle for half a minute, and then glance at the cross to the right. Where you previously saw a gray circle on a white background, you now see a white circle on a gray background. This is a natural illusion called "after-image." It is easily explained. Staring at the same point, the black cross holds the eye from moving all over the page, and the same set of nerve endings in the retina remain fixed upon the same spot upon the page during the half-minute of staring. The nerve endings that see the gray, see gray during the entire period of fixing of the eye upon the black cross, and the nerve endings in the retina in the back of the eye that are fixed upon the gray circle tire of seeing gray and the nerve endings fixed upon the white tire of seeing white. In fact, the nerves in the retina tire of seeing whatever they are fixed upon whether this be gray or white, because fixing the eyes produces strain, and strain tires the nerves. The tiring of the nerves makes it impossible for the delicate nerve endings to return to normal when suddenly released from the tension of the strain. As a result, the nerve stimulation remains on

beyond the ordinary nerve message carried to the brain, and you find yourself seeing just the opposite of the color fixed upon. The nerve endings in the retina that tired of seeing gray, now see white and the nerve endings that were seeing white now see a shade of gray. This reversal of the field of vision lasts for about a minute before the eyes return to normal and the strain is relieved. The tiring of the nerves of the eye produces a lack of balance in seeing and results in the phenomenon called "after-image." After-image is the result of strain.

You will notice that if you do not hold your eyes still and stare at the cross in the center of the gray disk there is no after-image when you look at the cross to the right. In other words, you must hold your eyes perfectly still and stare in order to produce the after-image. It is the staring that tires the eyes and the moving of the eyes that relaxes, preventing strain and defective vision.

Eyestrain plays peculiar tricks on us. When we strain our eyes, we often see objects other than they really are. To demonstrate this to your satisfaction, open this book to the Snellen Test Type chart on page 112. Prop the book up on a table and walk away until you can read all but the bottom line. If you have eyestrain, the larger letters will look the blackest and the smaller letters less black. In fact, the smaller letters will appear quite gray.

Walk back to the book and you will see that all the letters are printed with the same intense black ink. The fact is that the normal eye will see the smaller letters even blacker than the larger ones. This is due to the contrast of the black letters against the white page. To see the smaller letters less black than the larger letters is a definite sign of eyestrain. To see the smaller letters gray instead of black is as bad as

to see them pink or blue when really they are black. You must learn to relax your eyes and see things as they really are. You must overcome eyestrain if you are to have perfect vision.

It is true that you can strain your eyes for a while and "get away with it," but eventually you will pay the cost. Cataract is an outstanding example of this continued eyestrain. When you stare and strain your eyes, a blurring of your vision results. This blurring of the eyes is a formation of a cataract condition shutting off your vision. As soon as you relax your eyes, the cataract disappears and the vision clears. This cataract formation is the same terrible condition that is described under the chapter on cataract, except that this cataract disappears as soon as you relax the strain. When you stare at anything and stare long enough for your eyes to blur, temporary cataract forms to protect the retina. Shake your head or blink your eyes to break the stare, and the blurring is gone. Your vision returns, and the temporary cataract is gone.

However, if you continue to strain and stare without relaxing your eyes, the cataract forms and finally becomes a permanent condition of your eyes. Cataract of the eye may be overcome if you follow the directions of this book for the relaxation of strain and the suggestions under the chapter on cataracts.

## CAR OR TRAIN SICKNESS

As you ride on a train or car, the countryside seems to move and swing past you while the train seems to be stationary. This illusion of motion is natural to normal vision. If the eyes try to hold the country still while moving past it, the eyes will immediately feel the tightening and tension of the strain and often a sickness in the stomach. This car sickness is the result of the great amount of nerve energy used by the eyes in holding the country stationary.

Those unfortunate individuals who must always ride facing a certain way to prevent car-sickness and even then feel that peculiar upset condition, should try this suggestion on their next trip.

Look at the middle distance of the passing landscape. Do not look at the distant focal point or the near point that seems to be the rim of the cartwheel that is the revolving landscape. Do not try to hold the country still, but let it swing by. Let it go, and, in fact, help it by swinging, keeping the eyes focused about one-half the depth of the landscape. The car-sickness actually comes from looking at the distant point or the close point and then trying to stop the whirling of the landscape. Let the country pass as it will, and the nausea of car-sickness will disappear in a few minutes.

The same holds true in most cases of sea-sickness. Try to hold the swaying water stationary, and the extreme nervous effort upsets the digestive system. However, there are cases when sea-sickness is caused by the movement of the fluids in the semi-circular canals in the ear. In this case applying the principle of eye sight will not solve the problem.