

## CHAPTER I

### THE PROBLEM

**WHEN** the human eye begins to falter, whether in adults or in the youngest children, the conventional method of treatment is to call in the assistance of compensating lenses. The claim that is made for these lenses is that they neutralize the effects or symptoms of the conditions which are present as the cause of the failing function.

If it is necessary for men, women, and children who are wearing glasses to continue to wear them, let us hope they will all secure the best possible fit. But if it is possible to correct the fault that is interfering with normal vision, why do we not relieve the abnormal condition, instead of ignoring the eye, and using glass lenses instead? During hundreds of thousands of years the human eye developed into the most marvelous and the most necessary of the sense organs. Upon what grounds has it come to be an accepted belief that there is no possible way to cure an abnormal function in the mechanism of vision, even though abnormal functions and diseased conditions are being cured in every other part of the body?

There is a prevalent impression in the public mind that when any difficulty in seeing becomes apparent, there is no other help available but wearing of artificial lenses. This vague consciousness might be spoken of as a belief. But it is not a belief that is founded on any knowledge of the subject. The public mind knows very little of the factors or the mechanism of vision; it asks no questions, and it does not even consider the plain facts which are generally known. Just a little consideration of the many simple, established, obvious aspects of this most vital question arouses an astonishing reaction to a situation which is of national importance.

Whence comes this vast ignorance about the impending calamity to the power of vision? Why is the United States fast becoming a nation helpless in its daily life unless it has a pair of artificial lenses attached to its eyes? Why have the

people come to believe this anomalous mis-information, as though it were the very truth?

Where there is a great cloud of smoke one knows there is a fire. This habit of wearing glasses, in this country of ours, out of all proportion greater and worse than in any other country, is growing like the size of a large ball of snow rolling down a hill. There are many factors at work in this strange development. But the chief factor is the activity of a vast modern sales organization, which is using all the devices of psychological salesmanship to persuade the population of the country that the only relief they can hope for, when their eyes begin to falter, is the life-long dependence upon artificial lenses. This propaganda even goes beyond that and warns now that those whose eyes are showing no signs of failure, should hurry and put on glasses anyhow — even though it is well known that eyes always grow more dependent after glasses are imposed on them, and they rarely ever relinquish them once they are attached.

But if it has been decided by the medical profession that this artificial aid is the only known method of relief, would it not be wise to consider the import of this final answer from the men upon whom we must rely for whatever help is to come in this most serious extremity?

If further search for relief is to cease, the situation is a promise certainly of the progressive degeneration of the human eye. That is the law. The glass lens will become the master of the lens in the eye. Just as the wearer is to become the property of the lens maker, so the eye is to become the slave of the glass lens. We are beginning already to see the warrant for such a statement in the rapidly increasing use of artificial lenses. In our own country this custom of wearing lenses is becoming a contagious habit. Furnishing the glasses has become a tremendous enterprise.

In the great war it was found necessary to lower by half, the standards for vision required of soldiers. These standards were already well below those required for average normal vision. Having allowed for the use of lenses, the United States Army found it necessary to accept men with only one-fifth normal vision without lenses, if one eye could be brought up to one-half normal vision with glasses.

Some have estimated that of those in civilized life today over twenty-one years of age, only one in ten has normal sight. Personally I have met many, mostly children, however, who

can read readily at fifteen or twenty feet the line required to be read at ten. At forty years of age there are very few without visual defects.

This problem of defective vision has been disturbing the medical profession for a century. In Germany the Imperial Government tried for years to stop the increase of the use of glasses. The effort failed completely. But in Germany today many are having success with their eyes, in an organized system of schools for the improvement of vision. In a translation into English of an article in a German medical magazine published in Leipzig, the principles upon which their work is founded are credited specifically to the discoveries of Dr. Bates.

As illustrations of their success, it is stated that a class of young men was received in the army who were nearsighted because their eyes had been habituated to functioning with work which demanded nearsighted vision. At first they could not adjust their eyes to distant objects. It very soon developed, however, that the danger involved by that so impressed their minds that their eyes learned to see what was necessary. A soldier was such a good marksman that he was detailed as a sharpshooter. This involved an examination of his eyes by a specialist, who fitted him with glasses. Wearing the glasses, his marksmanship became very poor, and he was dropped from the corps. He was taken charge of by a vision school, his glasses were removed, his skill returned, and he was reinstated as a sharpshooter.

England, also, now has the beginning of a similar movement, and gives notice of a School of Eyesight Training in London. It is taking up the work of Dr. Bates in a practical way, on the principles established by him. The children especially are to have the advantage of a training in the scientific and humane use and development of their eyes, instead of being afflicted and obstructed, in their early developing years, with a pair of artificial lenses as an endowment for life.

Commenting on the use of artificial lenses, an ophthalmologist recognized as an international authority, Dr. Sidler-Hugenin of Zurich, Switzerland, writing in 1916, expressed the opinion that lenses and all methods now at our command are of but little avail in preventing either the progress of the error of refraction, or the development of further complications. This commentary was given as the confirmed judgment of a specialist who, during a lifetime of private and clinical prac-

tice, was interested especially in finding an answer to the problem of the efficacy of lenses. He reported particularly that with one class of patients, connected with the educational institutions of Zurich, the methods that he prescribed failed to correct the faults in the functioning of their eyes, despite their earnest, faithful, and constant adherence to his instructions.

Those who find it necessary to seek the assistance of glasses seem to take it as a natural thing that their eyes should fail to function in the beginning of life. They rarely have interest enough in the calamity to ask why it happened. If they ask, they are generally told that the cause is what is called eyestrain. No one seems to ask what eyestrain is. No cure is offered for it. So they put on glasses, and generally they seem to feel quite proud about it. It has become so fashionable! As a rule their eyes get weaker, of course, and sooner or later they get a stronger pair of glasses. In many cases the glasses are quite satisfactory, until the eyes get so much worse, and then it is a simple thing to buy another pair in the series of glasses they are going to need. But in many cases the eyes refuse to agree with the glasses, and there is a constant conflict. So what is there to do?

In a recent article describing the very fine course of training, mental and physical, which is given the Naval Academy students during their four years at Annapolis, it is reported that last year the honor man could not be commissioned to the line. He was rejected, after four years of perfect record, because his eyesight had failed slightly in his senior year.

There are those who write that human eyes have not sufficiently evolved, because nature did not intend they should, to meet the situations encountered in the ordinary life of today. If such preposterous assertions were true, consistently all of the naval cadets would suffer the same defeat as that honor man was impaled upon — just because there occurred a temporary faltering of his vision, due plainly to a continued physical and mental stress — which is not necessary. It is a fair question to ask why the eyes of that perfect specimen failed him. It is of vital importance to ask what, if any, deliberate attention is given, in that meticulous curriculum, to the mechanism and the care of the eyes of the cadets.

Dr. W. H. Bates of New York City, many years ago conceived an original idea. Why not cure the abnormal condition of the eye? Why not treat it as the medical profession treats

an abnormal condition of any other part of the body? To find the cause and then to devise some means of relief involved research work which led him into fields never explored before. What he discovered will be explained. The system he originated will be described. By following his directions it is possible to correct the faltering function of the eye, and recover normal vision.

## CHAPTER II

### THE BACKGROUND

**T**HE principles of this new method of treatment, which was discovered by Dr. Bates, are founded upon facts that are plainly in sight, but have heretofore been ignored. It is established that in most of those cases where artificial lenses are being used as a help to seeing, there is no change in the tissue structures of the eye itself. The fault, as diagnosed, is principally an abnormal functioning of the nerve and muscle mechanism. This is a condition quite common in the conduct of other functions of the human body. In every similar condition the expectation of the physician is to correct the fault and develop the normal function.

Nervous indigestion, a condition called nerve tire, the well-known unexplained insomnia, neuralgias for which no cause can be found, various habitual muscular twitchings, are all illustrations of conditions in which the abnormal conduct is owing primarily to some disturbance in the mechanism of the nerve control. Such abnormal functioning can generally be corrected. In many cases the only found cause of the abnormal nerve impulses is an abnormal functioning of the control center in the brain.

Psychologists and psychiatrists have been insisting for years that a large percentage of the above cases should be treated exclusively by mental suggestion. Reports are being made to scientific conventions of cures effected by mental treatment only, after reported failure to cure the given cases by the use of drugs. In what are called spontaneous cures, the patient reports symptoms have ceased, and the patient does not know, and the doctor does not know either, what caused the symptoms or why the disturbances ceased.

A young woman afflicted for years with irregular and distressing twitching of the arms and of the muscles of the face, uncured during some years of medical attention, stopped it all suddenly, and stayed cured. There are many who stutter badly under certain conditions of nerve tension, and do not stutter

at all when there is no mental stress. In the offices of nerve specialists are found many varieties of painful or disturbing dysfunction for which no cause can be discovered. It is generally believed by the medical profession that these conditions, classified and treated according to indications, are the results of some abnormal functioning of the centers in the brain which control every part of the mechanism of the human system.

The different kinds of disturbances of vision vary greatly in the degree of trouble that is present at different times. A woman who was deaf for years, and could not secure relief, was shocked mentally by her sensations in a falling airship, and during the emotion her hearing returned. A man who for many years could not manage at all without glasses, broke them while on a trip up in the mountains. He had no others with him, and he got along so well without them that he has never worn them again during the several years that have passed.

Failures in sight, and illusions in sight are so common, that an authority among ophthalmologists coined a phrase "seeing is deceiving." In a large percentage of cases of abnormal vision the principal fault is not a matter of physics or physiology, it is primarily psychology. That fact is really the foundation of the method of treatment originated by Dr. Bates.

A man of twenty years, who always found it impossible to see work or printed matter except at very close range, was permanently cured of the fault in one hour by this method of Dr. Bates. Encouraged by that success, his brother, two years older, presented his right eye, which had been blind from birth. He had consulted only an optometrist, years before, and had been told that the eye was undeveloped. Before treatment was begun I sent him to get the complete information from a medical specialist in the clinic of a large hospital. He was told there that his only chance was to cover the good eye whenever he could, and thus encourage the undeveloped eye to develop. He was told also that it would be two or three years before he might expect any improvement. Under treatment by the Bates method, however, in a few days he could read the upper lines on the Snellen Chart three feet away, and he continued to improve rapidly.

A young woman of twenty-two years reported that her brother's right eye had been crossed from earliest years; but that it was her left eye which had been crossed from her earliest recollection. About ten years before her visit to my office the strabismus (crossing of the eye) shifted, and the right eye

turned outward while the left eye became straight. She had worn glasses for several years, and could not see her work in a large office without them. In two hours her right eye was perfectly straight, and has remained so for three years now; and she has never worn her glasses since. This was not a miracle. In the standard textbooks it is explained that crossed eyes may change spontaneously from one oblique direction to any different oblique position, or the strabismus may transfer itself spontaneously from one eye to the other, just as had happened to this patient while under my treatment for two hours.

A child of eight, thrown down by what is called a police dog, received as the immediate result of the mental shock a pair of crossed eyes. Most histories of crossed eyes originate as a consequence of an attack of measles or scarlet fever or some other acute or chronic disease. Since such a condition may come in an instant, may change spontaneously, often varies greatly, and in some cases disappears spontaneously, why should it be considered unreasonable to expect that the condition can be cured in the same manner that other conditions of the same nature are being cured?

The cases selected from my records are illuminating examples of the effects which can be secured in the treatment of abnormal conduct of the eye by developing an interested attention to the condition on the part of the mind. For years this has been the method used by medical men in the treatment of similar dysfunctions of other parts of the body. These selected cases of mine, and others just as remarkable, are in evidence today, and the given records are correct.

Eyes which develop noticeable abnormal function misbehave in many different ways. The misconduct of such eyes varies constantly in degree and even in kind. In many cases those eyes cease to act abnormally. Where glasses have been worn, they are discarded, and the conduct of the eyes continues to be quite satisfactory without them. In the majority of eyes an abnormal function continues. The wearing of glasses never corrects the abnormal condition. When eyes recover normal sight, in any case, the change is produced through the internal mechanism controlling the eye. That eyes do recover normal function cannot be questioned. This certainly proves that such a power is inherent in the eye. It remains only to discover how best to help those eyes which can regain their natural power.

In many cases it is quite practicable to teach a patient who is having trouble with eyesight how to correct the abnormal function and regain good normal vision. There are different techniques, or procedures, in the method originated by Dr. Bates. They are all very simple, and they are varied so that they are adaptable to every kind of condition, and temperament and opportunity. In this book all of these practices will be described so that it will be possible to learn definitely from the text how to carry them out.

These practices sometimes produce most gratifying results in a few minutes. But in other cases, even with the best of intentions, progress is slow. It is not always possible to discover why a patient cannot secure the same success, even when the difficulty is less in degree. But whenever there is an earnestness of purpose, some proof of dormant power will come in flashes of normal vision. Words or letters will be seen vividly for an instant, and sink back again into the haze, as though a bright light had flashed, and then gone out. I have at times impressed the mind of a patient by bringing back the vividness that came and went, when I threw onto the letters the radiance of a 1000-watt light, or took the patient to a spot where the strong sun shone directly on the page or the test card.

The game is worth the candle. Those who have worked the hardest are generally the best pleased with their success. The mind that has become adjusted to the impairment of vision that is more or less crippled or dependent, is satisfied, if not content. But those who have said "Now is the winter of our discontent turned into glorious summer," are the ones who have realized the happiness of having won back the pleasure by their own efforts.

## CHAPTER III

### THE CAUSE

**SIGHT** is the most precious of the senses. In the last ten years of my practice as a physician, during which I have been especially interested in patients with various defects of vision, I have come to realize that very few have any real consciousness of the situation. Most people are distinctly less conscious of the work of their eyes than they are of almost any other of the organs and functions of their bodies. An abnormal functioning of the stomach, causing more or less distress, attracts very prompt attention. The mere consciousness of the beating of the heart arouses immediate concern. But it is possible for their vision gradually to lose its power to a considerable degree before their inattentive observation remarks the failure of their eyes to discern objects with the same acuteness and ease that they formerly had. When they find themselves obliged to seek relief, they realize that the only help they know of is the use of artificial lenses for the remainder of their lives.

From sources which are not only most interesting, but are of the most vital importance, there has been developed and fostered in recent years a new and prevalent psychology. It does not relate primarily to the human eye. The eye itself seems to be like the "forgotten man." This psychology relates to the wearing of artificial lenses. The atmosphere is so pervaded with glasses, with new and changing styles of lenses and frames, that there is plenty of proof of the claims of a large corporation that it is rapidly making the people of the United States what it calls "eye conscious." The condition might certainly be better designated as eye unconscious. People seem to forget, for themselves and for their children, what it means to put on glasses for the remainder of life. They do not seem even to ask why no other help is possible, and do not seem to care. I have known those who have argued against the removal of plainly diseased tonsils, and even a diseased appendix, to use the slightest kind of a fault in vision as an excuse for joining the procession and appearing proudly with a pair of glasses.

My purpose here is to paint in plain words some pictures

that are rather obscure to most of those whom doctors call the laity. Even those who do not wear glasses now, or those whose children are not bespectacled yet, may do well to step out of the procession long enough to look at the prospect I am going to describe and ask themselves if they are interested.

Over forty years in the practice of general medicine have given me opportunity to observe the functioning of the organs of the human body, and likewise, opportunity to observe the conduct of the human mind in its relation to these organs. The fact that I was not, until recent years, engaged in treating the eye itself, has made it easier, perhaps, for me to record whatever impressions I gathered about eyes and vision without any prejudices. Moreover, the peculiar experiences I have had with my own eyes have prepared me for the reception of personal impressions with more open-mindedness than if I had never worn glasses. It has some significance, too, that I have now used my eyes for ten years without glasses after having worn them constantly for thirty-seven years. The experience I have had with my own eyes is a rather extreme illustration, but it is in kind quite similar to the common course of conduct that is the story of eyes which cause trouble because they do not behave in a normal manner.

My vision was quite good until I was twenty years old. The change came with a crash. A severe and remarkable mental shock introduced a long record of peculiar and variable astigmatism. One summer day I dived into the Hudson River on the water-front of New York City. With a group of strong swimmers I joined in a race to an iron freighter and back. It was a quarter of a mile each way. On the way back my strength gave out and I fell behind. Soon I was alone, in forty feet of water, and unable to swim farther. I can remember, as though it were yesterday, the startling vividness of the picture of the brick barge I must get back to. It was as small as a hat and seemed miles away. The others saw my danger and came back to me. In their company my courage returned and my strength came back. That incident made such an unconscious impression on my inner mind that some hours later I suddenly found myself blind. Sometimes I could see nothing, and then there would be a film, and then it was dark again. In an hour my eyes were clear, but they were not normal. It became necessary for me to wear glasses constantly, and I continued to wear them for thirty-seven years.

My father was a physician, and the first eye specialist he

took me to was very kind for some weeks, but my eyes were helped very little. I soon realized that my sight was quite variable. There was indistinctness, sometimes less, sometimes more, there was blurring, there was discomfort. The variable-ness was noticeable whether the glasses were on or off. We tried a second specialist, and finally a third. The last doctor fitted me with glasses that were much more satisfactory, and I wore them for three years before they had to be changed.

It was only after I learned the fundamental meaning of the discovery of Dr. Bates that I came to understand why those lenses suited my eyes so much better one time than they did another. It was so simple after all. The conduct of the eyes was varying constantly, but the pieces of glass never changed. My condition was diagnosed as astigmatism. That word has a bad case of astigmatism itself! The explanations are contradictory. We are told that it is incurable, but many cases of cures are on record, that recovered without any doctor's help. Apparently the cause of the trouble dissolves out of the picture. In some cases the condition varies constantly, and in others it disappears and probably sooner or later returns. I was told that my astigmatism was congenital; that I was born with it; but it came in an instant, and it was caused by the strange mental condition that I crashed into three hours before, when my eyes shocked my mind.

The experience with which my own years of astigmatism and nearsightedness was inaugurated is named in the textbooks a psychic amaurosis. That means a blindness in which there is no apparent change in the eye tissues. There is a similar condition called amblyopia, in which there is a dimness in any degree up to blindness. Either of these conditions may be temporary or permanent. Try to realize the significance of such conduct in an eye which shows no cause, in the eye itself, for the terrible calamity. The same conditions are found even when there is no apparent change any place in the body that might be a cause. Both of these conditions therefore, may come without any apparent cause. This means that certainly they must be caused by some condition in the mind; and that is why they are described as psychic. They often disappear as they came, without any warning and without any explanation — except that their conduct is determined by the mind. Does this not make it plain that the simpler, common dysfunctions of the mechanism of vision are also caused by abnormal conditions in the visual center in the brain?