## September 1922

Better Eyesight

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

September, 1922

### COMPARISONS

IN practicing with the Snellen Test Card, when the vision is imperfect, the blackness of the letters is modified and the white spaces inside the letters are also modified. By comparing the blackness of the large letters with the blackness of the smaller ones it can be demonstrated that the larger letters are imperfectly seen. They really have more of a blur than do the smaller letters which cannot be distinguished.

When one notes the whiteness in the center of a large letter, seen indistinctly, it is usually possible to compare the whiteness seen with the remembered whiteness of something else. By alternately comparing the whiteness in the center of a letter with the memory of a better white, as the snow on the top of a mountain, the whiteness of the letter usually improves. In the same way, comparing the shade of black of a letter with the memory of a darker shade of black of some other object may be also a benefit to the black.

Most persons with myopia are able to read fine print at a near point quite perfectly. They see the blackness and whiteness of the letters much better than they are able to see the blackness of the larger letters on the Snellen Test Card at 15 or 20 feet. Alternately reading the fine print and regarding the Snellen Test Card, comparing the black and white of the small letters with the black and while of the large letters, is often times very beneficial. Some cases of myopia have been cured very promptly by this method.

All persons with imperfect sight for reading are benefitted by comparing the whiteness of the spaces between the lines with the memory of objects which are whiter. Many persons can remember white snow with the eyes closed whiter than the spaces between the lines. By alternately closing the eyes for a minute or longer, remembering white snow, white starch, white paint, white cloud in the sky with the sun shining on it, and flashing the white spaces without trying to read, many persons have materially improved their sight and been cured.

#### AN EDUCATOR OFFERS PROOF

Received too late for publication in the special August School number of Better Eyesight is the following report by Professor Husted, Superintendent of Schools of North Bergen, N. J., of the astounding results in the improvement of children's vision achieved through the use of Dr. Bales methods. The report, made independently, by Professor Husted to the school commissioners of his locality, is definite, irrefutable proof, from an unquestionably neutral observer, of the efficacy of those methods.

IN the schools of North Bergen, New Jersey, are some six thousand children. They are, besides being children of a typical near-metropolitan community and a part of the coming generation of our citizens, men and women, a representative living laboratory of childhood. And in that laboratory has been performed a practical test by Professor Husted, Superintendent of Schools, the results of which are stated by him in the subjoined extract from a regular report to his school commissioners.

They are of vital significance. Professor Husted's report says:

High Spot Normal Eye Health Crusade a Successful Three Years' Experiment

Early in October, 1919, under the direction of our school nurse Miss Marion McNamara, a Snellen Test of the eyes of all of our pupils was made. A novel health experiment was begun, a campaign for "Better Eyesight." In June a second test was made in order to verify the value of progress in this phase of health work. The June test of 1920 shows marvelous, practical, successful results. Only the skepticism of principals, teachers and pupils and lack of faithfulness in carrying out its conditions, prevented the wonderful results achieved from paralleling those of an Arabian Knight's story.

Eye Strain

Swift says: "Eyestrain is so frequently the cause of headaches that the more intelligent physicians now make this the starting point in their diagnosis. It may produce loss of ambition, disinclination to study and apparent dullness. It may even develop predisposition to epilepsy and insanity. The apparently organic diseases which may be caused by uncorrected ocular defects seem to cover the entire field of pathology.

Eyestrain sometimes reacts upon the moral nature and may even result in a permanently perverted disposition. Children who can focus their eyes for near objects only by constant and severe effort, cannot be expected to enjoy studying."

Myopia and Other Errors of Refraction

Bates says: "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 black-board, 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 effect 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 the 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 the 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."

Bates: The Prevention of Myopia in School Children, N. Y. Medical Journal, July 29, 1911 [link].

A Snellen test card was 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. 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 1911 and 1912 the same system was introduced into some of the schools of New York City, with an attendance of about 10,000 pupils. 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, use the system intelligently and persistently, and in less than a year were able to present results showing that of three thousand children with imperfect sight over one thousand had obtained normal vision by its means."—Bates, Myopia Prevention by Teachers, N. Y. Med. Jour., Aug. 30, 1913 [link].

The following summary shows the remarkable results of the North Bergen experiment in the use of the Bates System. The first grades are omitted because of the difficulty in making accurate tests.

Grades II. to VIII.

Schools No. Tested No. Absent 2nd Test

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1921
1922
 1920
 1921
 1922
Grant .....
72
100
133
0
4
19
Robert Fulton .. 359
498
672
11
4
Franklin ......
341
339
418
17
3 54
Lincoln ......
388
585
873
21
21
135
Hamilton ......
211
225
204
 12
1
8
Jefferson .....
526
542
609
33
16
41
Washington .....
543
538
11
15
67
Horace Mann ....
335
319
446
5
19
45
McKinley ......
144
157
313
17
5
36
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Totals .....
2729
3308
4205
127
88
527
Schools
No. Below 20/20Normal Standard
No. BelowImproved
% Improved
1920
1921
1922
1920
1921
1922
1920
1921
1922
Grant .....
36
31
31
30
16
19
83.3
51.6
61.3
Robert Fulton ..
112
127
152
76
84
56
75.2
66.1
36.8
Franklin ......
103
102
100
53
53
53
61.6
51.8
53.0
Lincoln ......
169
131
162
103
90
71
69.4
68.6
43.8
Hamilton ......
78
60
42
48
40
22
72.7
66.6
52.4
Jefferson .....
216
181
147
109
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117 86 59.5 64.6 58.5 Washington ..... 184 134 136 107 84 80 63.4 62.6 Horace Mann ... 96 70 100 66 42 61 72.5 60.0 61.0 McKinley ..... 75 38 91 35 21 52 94.8 55.2 57.1 Totals ..... 1049 874 961 647 547 500 70.1 62.5 52.0 This is a remarkable demonstration of the priceless values of this method of treatment. That 647 or 70.1% of the 922 pupils below normal (20/20) should have been improved in eyesight in 1920,

and 1921. This reduction from 38% to 26%, and then 23% must be due to those pupils who are benefitted and remain in the North Bergen system.ÿýWe have enrolled 389 new pupils from other systems this year.ÿýAs the percentage of pupils below standard becomes less, (38%, 26%, 23%) the percentages of improvement has become less (70.1, 62.5, 52). This suggests that many cases remaining in our schools are less amendable to treatment and should, therefore, receive persistent and systematic attention.

Not only does this work place no additional burden upon the teachers, but, by improving the eyesight, health, disposition and mentality of their pupils, it surely lightens their labors.

Regular Monthly Meeting

At eight o'clock, at 300 Madison Avenue, New York City, the September meeting will be held, the evening of September 12.

Lack of space prevents, of course, the verbatim reporting of the various meetings But every one who can should surely be one of the gathering at each meeting of the League.

THREE THINGS WHICH WILL PRODUCE BETTER EYESIGHT By Dr. W. H. Bates

In this article Dr. Bates offers some remarkably helpful suggestions for those who are trying to improve their sight without the use of glasses. Every reader should study the ideas offered here very carefully.

THERE are three things which are important or necessary for the patient to practice while under treatment. The most important of all is to see things moving, or rather to be conscious that stationary objects are moving, in the opposite direction to the movement of the eyes. Unless this is done continuously one is apt to imagine stationary objects are stationary which is very injurious to the eyes. When riding in a railroad train one can imagine the telegraph poles, trees, hills, the houses and the scenery it moving in the opposite direction. When one drives an automobile it is important to watch the road straight ahead, and while the car is going forward the road appears to come toward the driver and he is very apt to pay little or no attention to the movement. He does not try to

imagine the road is stationary, as he knows by experience that it is impossible, and the effort stakes him uncomfortable. However, the passenger in the car is interested in the scenery off to one side, and in order to see things more clearly they make an effort to imagine things are stationary. For this reason alone some people suffer from headaches, nausea or other disagreeable symptoms when riding in a motor car. They complain that moving objects make them uncomfortable. It can always be demonstrated that it is not seeing things move which is uncomfortable but rather it is trying to stop the movement which causes the discomfort. Objects that are apparently moving rapidly are not seen clearly or perfectly. They are seen better when the car is not moving. One of the first things I have my patients demonstrate is that it is impossible to keep the attention fixed on a point and imagine it stationary for any length of time, and that the effort to do so is disagreeable and lowers the memory and imagination and sight.

Many people can remember a small letter q and imagine the white center as white as snow, or a white cloud in the sky, or very white starch. They can also imagine a little black period on the right edge of the o and imagine it perfectly black for a few seconds or longer, but the longer one tries to remember or imagine the more difficult it becomes. The eyes and the mind become tired and the period is for-gotten and the letter q is seen for a short time, when trying to imagine the period and the o stationary. It is impossible to concentrate on one point continuously. The dictionary says that concentration is an effort to keep the attention fixed on a point only and not to see anything else. To concentrate on a period on the right edge of the o continuously is impossible, and trying to do so is a great strain. All persons with imperfect sight consciously or unconsciously are trying constantly to do the impossible, to concentrate.

#### Stationary Objects Should Seem to Move

To see things moving all the time or rather to imagine the illusion that all stationary objects are moving opposite to the movement of the eyes is a great help in curing imperfect sight. It is well for the patient to have someone to remind them at frequent intervals of the movement of stationary objects. Many persons, when they are talking to you, feel it the proper thing to keep their eyes fixed continuously on your face, that is to say, to stare at you. Instead of moving their eyes from one eye to the other or from one side of the nose, to the other they stare at one eye continuously which lowers the vision and may cause headaches or some other discomfort. It is well to get into the habit of imagining the fac6 of the people are moving from side to side. To do this the patient requires constant supervision. In many cases when one becomes able to imagine things all day long, moving with a slow, short, easy movement from side to side, the vision becomes normal. If any other treatment, like palming or flashing or use of the memory or imagination helps the sight, the patient's ability to see things moving all day long is also benefitted.

#### Snellen Card and Fine Print

A card with letters printed on it can be used in such a way as to obtain perfect relaxation with consequent perfect sight. The Snellen Test Card has letters of different sizes arranged in such a way that one can measure the amount of vision of the patient, more or less perfectly. The Snellen Test Card, when placed in a school room and read every day, with each eye separately, by the pupils, always improves the sight, provided the children do not wear glasses. Most children under twelve years of age are cured in a very short time, a few weeks, or even less, but if they wear glasses they can-not be cured unless they stop wearing them. In families where the parents have poor eyesight and wear glasses it often happens that the children sooner or later appear to need glasses also. However, if they read the Snellen Test Card every day, at ZO feet, with each eye, imperfect sight is always prevented.

Children who are older than twelve and all children who have worn glasses require a much longer time to obtain benefit from the use of the Snellen Test Card. Some of these cases may require three months, six months, or even longer. When one studies the facts it seems remarkable the amount of damage that can be done to the eyes of children from wearing glasses. Only persons who are graduates of medicine should be permitted to prescribe glasses. In some cases it is well to require a knowledge of the eye and its numerous diseases. Patients come to me wearing glasses which do not improve the sight, rather lower it, who have disease of the optic nerve, or disease of the retina of very serious nature. I have seen patients, condemned to cataract, wearing glasses which did not improve their eyesight. Patients with glaucoma, a very treacherous disease, I have observed wearing glasses that they obtained from some optician or from some ignorant so-called eye-specialist.

#### Glasses Keep up the Eye Strain

It is a mistake to believe that even though the glasses do no good they cannot do harm. Glasses keep up the strain. i A person wearing glasses for myopia has to strain all the time in order to make the eyeball elongated sufficiently to fit the glasses. It can be very readily demonstrated, as I have frequently published, that under favorable conditions all persons with myopia are temporarily normal. When they try to see they strain in such a way that the eyeball becomes nearsighted. Some days they strain more than other days, and many people tell me that they notice that, with their glasses on, their vision was extremely variable. The same is true with other errors of refraction. Reading the Snellen Test Card twice a day or oftener, after glasses are discarded, is a great help in improving the sight. If one can memorize the letters of, the Snellen Test Card and imagine that they can see the smallest letters on the card at 15 ft. or 20 ft., it can be demonstrated that their eyes are normal. I believe this is a discovery worth emphasizing. Always, when a patient imagines he sees or reads the letters on the Snellen Test Card with perfect sight the retinoscope demonstrates that the eye is normal and he is able to read the card with normal vision. I have no exceptions. One patient who had 40 diopters in myopia, when looking at a blank wall and not trying to see the retinoscope flashing the reflection of a light on to the center of sight, demonstrated that the eye was normal for longer or shorter periods; that when the patient regard the Snellen Test Card, 40 diopters of Myopia can be demonstrated.

While reading the Snellen Test Card gives great benefit to many people it should be realized or known that there are sonic cases who can be cured better without reading the Snellen Test Card. For some persons the Snellen Test Card is a PESSIMUM and the vision is lowered whenever some people regard it. I have seen a great many persons with normal sight when they regarded any ordinary objects, people's faces, houses, trees, flowers, who became highly myopic with considerable astigmatism whenever they look at the Snellen Test Card. One such person I cured was a champion rifle shot. When he looked at a bull's eye his vision was unusually good but when he looked at the Snellen Test Card lie had compound hypermetropic astigmatism with a vision of one-quarter of the normal. Glasses in such a case would have been a crime.

## Palming

One of the three things which patients are recommended to practice for the cure of their imperfect sight is to palm at least six times daily for five minutes or longer each time. Sonic persons with very poor eyesight who were anxious to recover as soon as possible have palmed nine hours daily with wonderful benefit. Palming for such long periods of time requires supervision because palming, like many other things, while it is, when done properly, a great benefit, can be used wrong. Instead of the vision improving many people have lowered their vision by palming. Instead of resting their eyes they would strain and would imagine all kinds of colors. Resting the eyes by closing and covering them with the palms of the hands improves the sight of most people. Some persons have obtained a cure by palming only. When the vision is not improved by palming do not practice it until one can learn how to palm properly. Palming has cured so many people that I always recommend it very highly to all my patients.

# THE SUN TREATMENT CURED THIS COLORED GIRL By Emily C. Lierman

NOT long ago a colored girl, aged 17, came to have her eyes fitted for glasses. As she stood among others waiting for treatment, I watched her as she 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 office patients who came to see how the work was accomplished at the Clinic was standing beside me and as she observed this colored girl, remarked: "Isn't she disagreeable looking? Do you suppose she will let you cure her without glasses?" 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 and 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. Palming seemed to relieve her so that she could open her eyes more with less pain, so she was instructed to rest her eyes, by palming often during the day. 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 she would not look up at the sun during the treatment. I raised her upper lid and with our sun glass I flashed the strong rays of the sun on the sclera.ÿThis only required a part of a minute and the effect was instantaneous.ÿÿFirst 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 Mam." She returned again on a sunshiny day for more sun treatment but she no longer complained of pain. The first treatment had cured her, On this same day we had another patient whom I know will interest our readers.

## Eye Trouble Often Due Merely to Foreign Substances

A woman who could not speak a word of English tried very hard to tell of her suffering. Her son, aged 14, was with her and he repeated to me in English what she told him in Greek. Twice she 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. I examined her eye very carefully and when I turned her upper eyelid inside out, I discovered two small eyelashes growing in. This had caused all her suffering because every time site 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 pleasure and happiness when our patients show their gratitude after their sufferings are relieved. My heart overflows with thankfulness because I am able to help.

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 and then they gave him treatment for rheumatism. The pain still continued so he called on Dr. Bates. Dr. Bates 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. I could go on describing such cases but I must leave room for something perhaps more important to our readers.

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