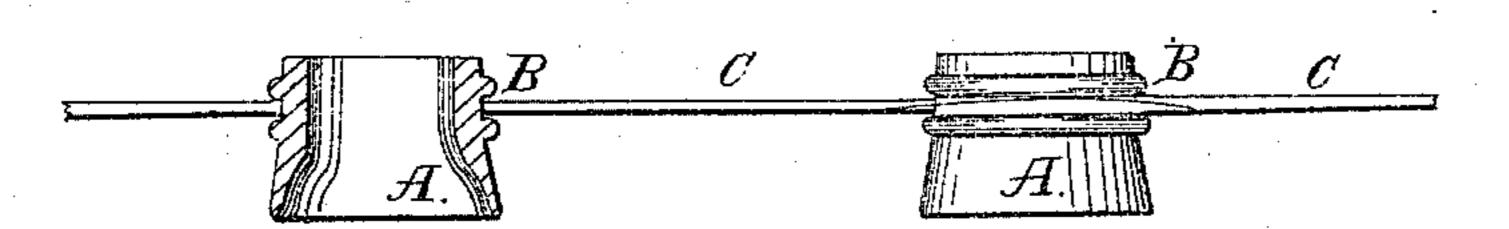
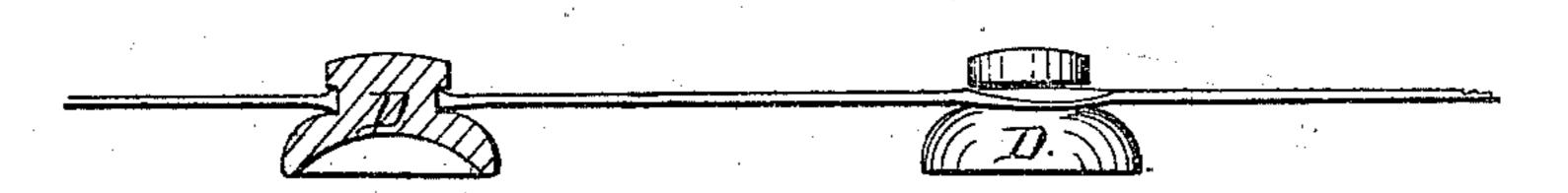
J. Ball; Correcting Sight. Nº 8,049. Patented Apr. 22,1851.

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## UNITED STATES PATENT OFFICE.

JONATHAN BALL, OF NEW YORK, N. Y.

MEANS OF RENOVATING AND CORRECTING SIGHT.

Specification of Letters Patent No. 8,049, dated April 22, 1851.

To all whom it may concern:

Be it known that I, Jonathan Ball, of the city and county of New York, in the State of New York, have invented a new 5 and improved mode of renovating the sight where it is lost by age or where the convexity of the pupil or cornea is flattened, but not diseased or distorted, and also of correcting the sight where the convexity is 10 too great, producing near-sightedness; and I do hereby declare the following to be a full and exact description.

The nature of my invention consists in forming for each eye, a cup large enough 15 in diameter to set upon the base of the ball of the eye, the edge of which is smoothly rounded which by being worn at intervals of two or three days, for an hour or two at each time will gradually and surely bring 20 the pupil or cornea to its original convexity and the sight to its youthful clearness and strength. This cup may be circular or elliptical. In case of nearsightedness the action is reversed. I form a cap with the inside 25 concave sufficiently when placed upon the closed eye to press lightly upon the center of the ball, which by being worn as the cups above described, will gradually lessen the convexity and correct the sight.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I form a cup for each eye of ivory, wood, glass, metal or any hard substance that can 35 be made smooth. The length five eighths of an inch more or less, and the diameter one inch more or less, to set upon the base of the ball of the eye, through this I make a hollow five eighths of an inch more or 40 less in diameter which forms a tube, the inner side, next to the eye is formed out to fit the proper convexity of the eye, leaving the edge thin but smoothly rounded—see letter A in the accompanying drawings. 45 On the outer side of the cups and near the

outer end I form a groove, or projections to hold the bindings which fasten them in their places upon the eyes—see letter B. I cut a strip of soft leather, through which I make slits to draw on to the cups into the groove 50 or between the projections, these slits are just distant from each other far enough to bring the cups centrally over the eyes—see letter C. I prefer this mode of holding them, although they may be held by springs, 55 or otherwise.

For near sight I form caps of the same materials as the cups sufficiently concave on the innerside, so as to rest heaviest upon the center of the ball of the eye (the lids 60 being closed)—see letter D. These caps may be made one inch in diameter more or less, and are held in their place by the same means and worn in the same manner of the

By applying the above invention two or three times each week, on retiring to rest, and before sleep, turning or rolling the eyes gently in them a few moments, the pupil or cornea will gradually resume its proper and 70 original convexity, and the sight its youthful clearness and strength. When the eyes begin to fail an occasional application will restore and preserve them through life. By the application of the caps in the same man- 75 ner by those afflicted with near sight the convexity will gradually lessen and the sight be corrected.

What I claim as my invention and wish to secure by Letters Patent, is—

The cups and caps to produce a pressure upon the periphery, in case of old age, or front of the eye in case of near sight, which will increase or diminish its convexity as the nature of the case may require.

JONATHAN BALL.

Witnesses:

JOSEPH STEPHENS, JONATHAN MASON.