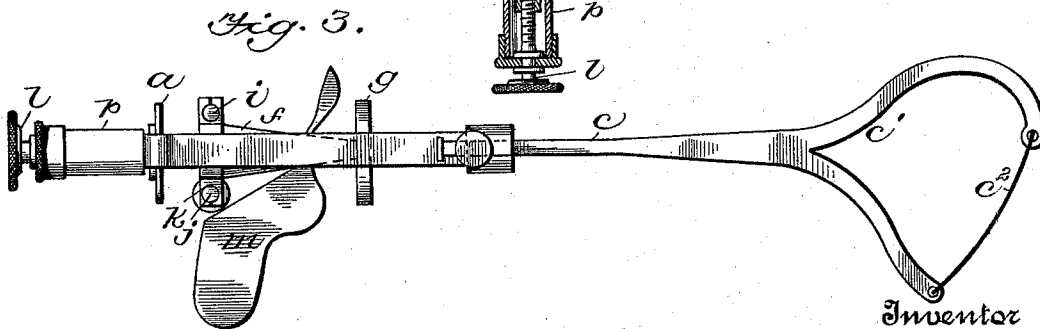
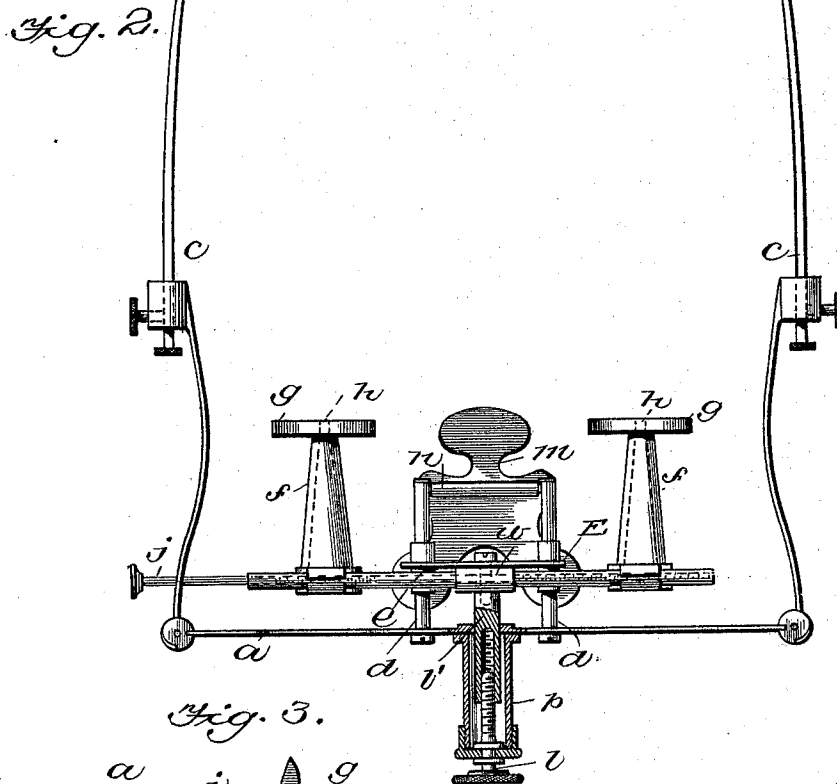
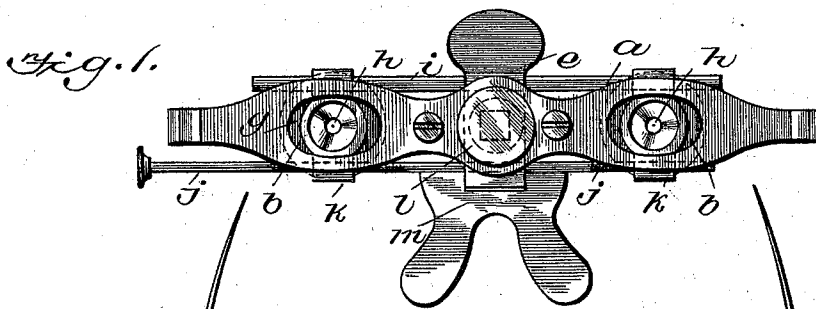


C. DION.

DEVICE FOR TREATING NEARSIGHTEDNESS.

No. 570,279.

Patented Oct. 27, 1896.



Witnesses
John D. Amie
D. B. Blagett.

Inventor
Charles Dion
by
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his Attorney

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

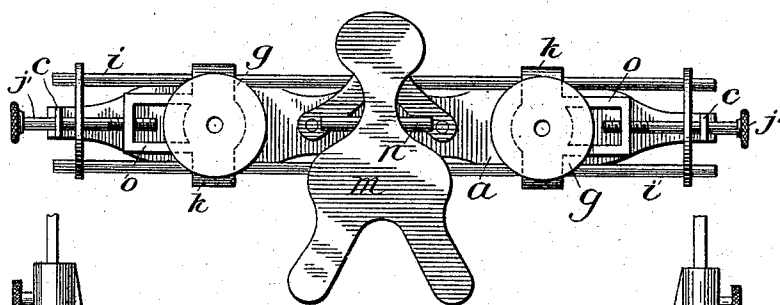


Fig. 5.

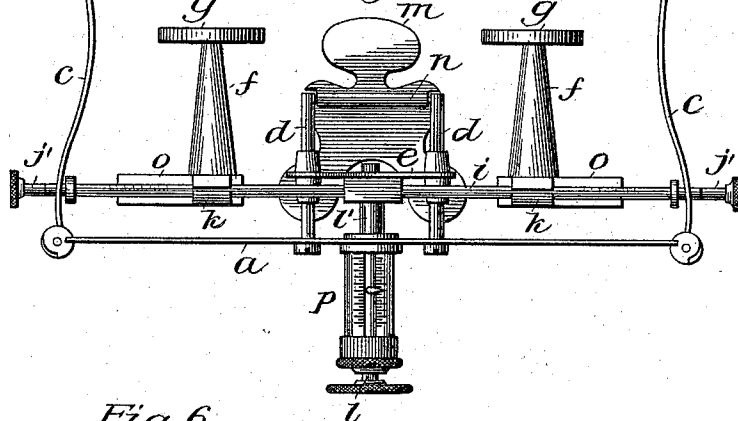


Fig. 6.

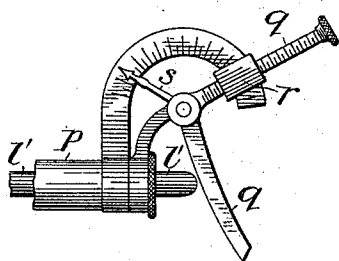
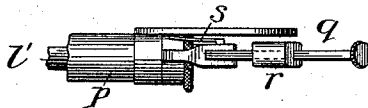


Fig. 7.



Witnesses.

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Inventor.

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by
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his Atty

UNITED STATES PATENT OFFICE.

CHARLES DION, OF PARIS, FRANCE, ASSIGNOR OF ONE-FOURTH TO OLIVER D. BARRETT, OF WASHINGTON, DISTRICT OF COLUMBIA.

DEVICE FOR TREATING NEAR-SIGHTEDNESS.

SPECIFICATION forming part of Letters Patent No. 570,279, dated October 27, 1896.

Application filed July 10, 1896. Serial No. 598,758. (No model.) Patented in France June 1, 1895, No. 247,859, and March 31, 1896, No. 255,197; in Germany September 17, 1895, No. 87,422; in England November 13, 1895, No. 21,563, and in Belgium May 2, 1896, No. 121,152.

To all whom it may concern:

Be it known that I, CHARLES DION, a citizen of the United States, residing at Paris, France, have invented certain new and useful Improvements in Apparatus for Curing Near-Sightedness, (for which I have received Letters Patent in France, No. 247,859, dated June 1, 1895, and March 31, 1896, No. 255,197; in Germany September 17, 1895, No. 87,422; in England November 13, 1895, No. 21,563, and in Belgium May 2, 1896, No. 121,152,) of which the following is a specification.

My apparatus has for its object the cure of short-sightedness by causing a light pressure on the eyes in order to diminish the convexity of their lenses and by allowing when the pressure ceases to look for a certain length of time at an object through a hole of a very small diameter.

In the accompanying drawings, Figure 1 is a front elevation of my invention. Fig. 2 is a top plan of the same. Fig. 3 is a side elevation. Fig. 4 is a front elevation of a modification of the apparatus shown in Fig. 1. Fig. 5 is a top plan view of the modification shown in Fig. 4. Fig. 6 is a side elevation of a gage for showing the pressure on the eyes. Fig. 7 is a top plan of a section of the same.

In the accompanying drawings, *a* represents a main plate with two openings *b b*, like those in common spectacles, to which plate are pivoted the adjustable bows *c c*. To the rear of each is secured a hook *c'*, which may be bifurcated, the branches being connected by an elastic strip *c''*.

d d designate guide-rods with sleeves to slide on them carrying the support *e*, which, with all its attachments, is given motion to and from the plate *a* by the thumb-screw *l*. A block of metal *w*, attached to the center of the support *e*, carries two parallel rods *i* and *j* in a plane parallel with the face of the main plate *a*, which rods are placed far enough apart to give between them an unobstructed view through the openings *b b*.

The letters *f f* designate tubes or hollow cones supported on the rods *i j*, and adjustable as to the distance between them by a screw mechanism, as shown in Figs. 1 and 2.

The screw mechanism shown in Figs. 1 and 2 is adapted to move each of the pads *g g* to-

ward or from the other at the same time and with the same rate of motion by means of the right and left hand screws on the rod *j*. Fig. 5 shows a screw mechanism by which each pad *g g* can be moved to the right or to the left without moving the other. This latter arrangement is especially useful for adjusting the perforations *h h* in the respective pads *g g* to the center of the line of sight of each eye where the distance between the bridge of the nose and each eye is not the same.

To the guide-rods *d d* is pivoted the bar *n*, to which is attached the nose-piece *m*, which, when the apparatus is in use, is placed on the nose of the patient, and the nose-piece being movable on the bar *n* as a center enables the operator to adjust the height of the pads *g g* to the height of the center of vision of the patient's eyes.

In using the apparatus it is adjusted on the nose of the patient, and the hooks at the rear of the bows *c c* are made to encircle the ears, and the centers of the pads *g g* are adjusted to the center of vision of the eyes of the patient, so that two rays of light passing from any one point of a given object through the openings *h h* in the main plate *a*, and thence through the centers of the tubes or hollow cones *f f*, and thence through the small holes *h h*, will enter, as near as may be, through the centers of the pupils of the respective eyes of the patient. The apparatus having been thus adjusted to the eyes, the distance at which the patient can clearly see an object with each eye through the hole *h*, tube or hollow cone *f*, and opening *b* is measured and noted. Then the patient closes his eyes, and by means of the thumb-screw *l* the pads *g g* are pressed gradually and lightly against the eyelids of the patient for a minute or two. Then the pressure is removed, and the patient on opening his eyes will find that he can see, through the holes *h h* in the pads *g g*, an object clearly at a greater distance than he could before the pressure was applied to his eyes, and this operation being repeated at intervals the patient's sight will become normal and will so remain.

In Fig. 6, *p* represents a graduated scale used to indicate the distance through which the thumb-screw *l* is moved.

In Figs. 7 means are shown for gaging the pressure on the cornea by means of a weight r on an arm q and another arm q' , arranged in the shape of a bell-crank and abutting against the stem l' , connected with the bar which extends across in front of the eyes.

The support of the nose-piece m may be made to slide up or down, so as to adjust it for every nose.

10 What I claim, and desire to secure by Letters Patent, is—

1. An instrument for the cure of short-sightedness, which consists of a pair of eye-pads, adjustable by screw mechanism to and from the eyes, and to and from a point between the eyes, substantially as described.

2. An instrument for the cure of near-sightedness which consists of a pair of eye-pads adjustable by mechanical means to and from the eyes, and adjustable independently to and from a point between the eyes, substantially as described.

3. An instrument for the cure of near-sightedness, which consists of a pair of eye-pads having perforations, in combination with mechanical means for adjusting them simultaneously to and from a point between the eyes, and means for adjusting them to and from the eyes in front, substantially as described.

30 4. An instrument for the cure of near-sight-

edness which consists of a main plate, in combination with eye-pads, and means for adjusting the eye-pads to and from the eyes and adjusting them to and from a point between the eyes, and bows at the side provided with loops for clasping the ears of the patient, substantially as described.

5. An instrument for the cure of near-sightedness which consists of one or more eye-pads adjustable with respect to the eye; in combination with a gage adapted to indicate the pressure being applied on the cornea of the eye, substantially as and for the purpose specified.

6. An instrument for the cure of near-sightedness which consists of a main plate provided with eye-pads adapted to be adjusted to and from the eyes and from a central point between the eyes, and provided with means for holding the plate in front of the eyes, and means for determining the amount of pressure being applied to the eyes, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES DION.

Witnesses:

CLYDE SHROPSHIRE,
D. T. S. FULLER.