

(No Model.)

W. S. WELLS.  
EYEGLASSES.

No. 383,604.

Patented May 29, 1888.

Fig. 1.

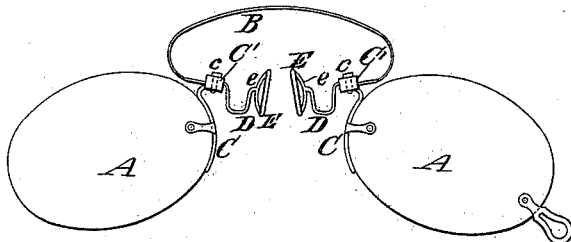


Fig. 2.

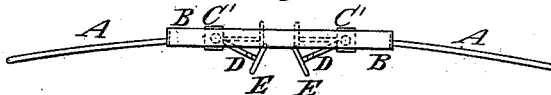


Fig. 3.

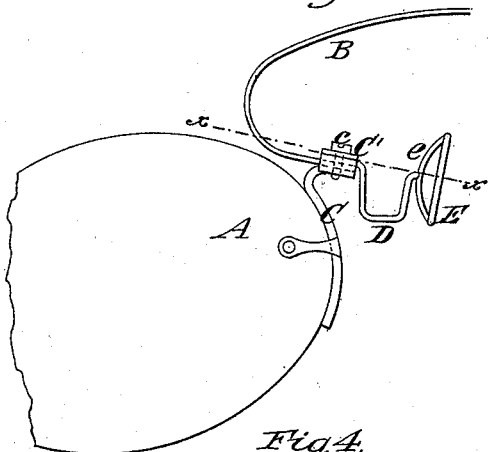


Fig. 8.



Fig. 7.

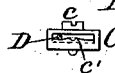


Fig. 4.

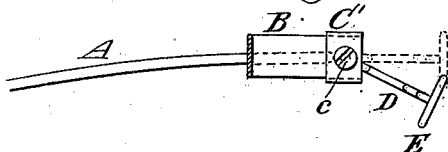


Fig. 5.

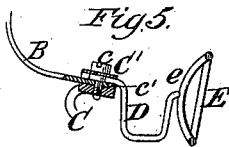


Fig. 6.

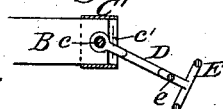


Fig. 9.

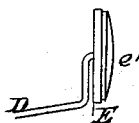


Fig. 10.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

WALTER S. WELLS, OF NEW YORK, N. Y.

## EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 383,604, dated May 29, 1888.

Application filed January 20, 1887. Serial No. 224,842. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER S. WELLS, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Eyeglasses and Spectacles, of which the following is a specification.

My invention relates to a peculiar construction and arrangement of the nose pads or guards, whereby they will be caused to embrace and bear upon the soft tissue or fold of skin forming the junction of the summit of the nose with the forehead, and interference with the lachrymal vessels, the nerves, and with the circulation of the blood by their bearing upon the nose in the usual place will be avoided.

My invention consists in the combination, with glasses or lenses, the posts or brackets, and the bow-spring, the ends of which are secured in said posts or brackets, of arms of ductile metal, each pivoted at one end to a post or bracket to swing in a substantially horizontal plane and each carrying at its free end a nose-pad and constituting the sole support of said pad. In the above combination each nose-pad may consist of a ring arranged to bear with its face or flat portion upon the nose and supported by the free end of one of said arms at about its diametrical center.

The invention also consists in the combination, in eyeglasses or spectacles, of nose-pads and arms each pivoted at one end to swing in a substantially horizontal plane transverse to the plane of the glasses or lenses, and at its outer or free end supporting a nose-pad, of which it forms the sole support.

The invention also consists in the combination, in eyeglasses or spectacles, of a bow-spring, boxes or other suitable joints receiving the ends of the spring, and nose-pads or nose-pieces each supported by an arm pivoted within the box or joint, the said boxes or joints being provided with cam-surfaces which hold said arms in substantially the same plane with the glasses, and which provide for swinging said arms into planes oblique to the glasses.

In the accompanying drawings, Figure 1 is a face view of a pair of eyeglasses embodying my invention. Fig. 2 is a plan thereof. Fig. 3 is a face view, upon a larger scale, of a portion of a bow-spring and one glass and a nose piece or pad embodying my invention. Fig. 4 is a plan of the parts shown in Fig. 3. Fig. 5 is a longitudinal section of the parts shown in Fig. 3, in a plane parallel with the plane of

said figure. Fig. 6 is a sectional plan view of the same parts upon the plane indicated by the dotted line *x x*, Fig. 3. Fig. 7 is an end view of a box-joint which receives the end of the bow-spring and the pivoted arm whereby the nose-pad or nose-piece is supported. Fig. 8 is a face view of a nose-pad or nose-piece consisting of an elliptical open ring; and Figs. 9 and 10 are respectively a side view and a face view of a nose pad or piece which is faced with cork, sponge, felt, or other comparatively yielding material.

Similar letters of reference designate corresponding parts in all the figures.

A A designate the glasses or lenses of the eyeglasses or spectacles, which are connected by the usual bow-spring, B. In what are known as "frameless" glasses the glasses or lenses are not held in place by eye-wires entirely encircling them, but are simply riveted to supporting arms or brackets C. In my adaptation the supporting arms or brackets have formed integral with them or rigidly secured to them box-joints or other suitable joints, C', the construction of which will be best understood from Figs. 3 to 7, inclusive. From these boxes or joints extend arms D, each of which supports a nose-pad or nose-piece, E.

My eyeglasses or spectacles are provided with simple nose pads or pieces E, which are adapted to embrace or hold upon the tissue or fold of skin only above the bridge of the nose and above the lachrymal ducts and accompanying vessels, and at the junction of the summit of the nose with the forehead, and they do not embrace or have any hold upon the bony structure of the nose.

The nose pads or pieces E are constructed to swing substantially upward and inward transversely to the plane of the glasses and in a plane substantially parallel with the upper periphery of the glasses or lenses, and I have represented the nose pads or pieces E as supported each by an arm, D, which is curved or bent and of ductile material, so as to provide for still further bending it readily to bring the nose pad or piece which it supports to the exact position desired to suit different persons, either high or low, or near to or far from the eyes.

It will be observed that the nose pads or pieces E are substantially coincident with or in a line touching the upper edges or tops of the glasses.

The ends of the bow-spring B may be fitted snugly within the box-joints C', as best shown in Figs. 5 and 6, and the arms D, which support the nose-pads E, may also be secured in these boxes or box-joints, and they are here shown as pivoted therein by screws or rivets *c*, which are substantially vertical, so that the nose pads or pieces E and their supporting arms D may be swung in a substantially horizontal plane transverse to the plane of the glasses or lenses A.

When the glasses are desired to be worn, the pad-supporting arms D may be swung back to the position shown by full lines in Fig. 2, and also in Fig. 4, so as to hold the glasses farther front or farther from the eyes than the part of the nose on which the pads E bear, and when it is desired to place the eyeglasses in a thin and flat case the pad-supporting arms D may be swung into the same plane with the glasses or lenses, as is shown in Figs. 2 and 4 by dotted lines. In order to hold the pad-supporting arms in either position to which they are adjustable, I may form upon the joints C' a very slight cam or projection, as shown at *c'* in Figs. 6 and 7. Each arm D constitutes the sole support of one of the pads E, and in swinging the arm D from the position shown by full lines in Figs. 2 and 4 to the position shown by dotted lines in said figures the arm must ride up over this acclivity or cam *c'*, and as it does so the arm is held in one or the other angle of the joint, according as the arms are swung in or out. It is also obvious that, if desired, the pad-supporting arms D may be swung beyond the position shown by dotted lines in Figs. 2 and 4, so that they will stand oblique on opposite sides of the planes of the glasses or lenses and in a reverse position to that shown in Figs. 2 and 4.

In what I now consider a desired form of the invention each pad or nose-piece E consists of an open ring, which may be of elliptical or circular form, it being here elliptical, and which has a cross-bar, *e*, to which the free end of the arm D is secured by solder or otherwise. The slight pressure with which these ring-shaped pads or nose-pieces are forced against the nose, especially upon the soft tissues at the root of the nose, tends to raise the flesh slightly within the ring, and thus secures the glasses firmly upon the nose. If desired, however, the pad or nose-pieces may be made in the form of a box, or formed as shown in Figs. 9 and 10, which is faced with a cushion, *e'*, of sponge, felt, or other comparatively soft yielding material.

In adapting my invention to spectacles it is obvious that the nose-pieces may be made to rest on each side of the nose without claspings or pressure being required by the spring B, as the spectacles will be retained in place upon the branches which are respectively attached to the outer sides of the frames or glasses which are in common use to pass over the ears.

I am aware that it is not new to provide eyeglasses with pads for bearing upon the

upper narrow part of the nose under the eyebrows, and hence I do not claim such pads as of my invention. The pads which form the subject of my invention have no bearing upon the nose proper, but bear and have a hold upon the free soft tissue or fold of skin which is at the junction of the nose with the forehead.

In all the forms of eyeglasses heretofore made or proposed of which I have knowledge the nose pads or pieces have been arranged and supported so as to bear upon the nose opposite the bony structure, and so that some portion of the bone of the nose comes between the pads or nose-pieces, and the objections to such pads or nose-pieces are in no wise lessened by arranging them to bear upon the upper part of the nose immediately under the eyebrows.

My nose-pads are arranged and supported to bear and hold only upon the soft tissues of skin, which is abundant forward of the bone in the upper part of the nose, and I am, I believe, the first to disclose to the public the advantages of so supporting eyeglasses.

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

1. The combination, with the glasses or lenses A, the posts or brackets C, and the bow-spring B, of arms D, of ductile metal, each pivoted at one end, at *c*, to a post to swing in a substantially-horizontal plane, and each carrying at its free end a nose-pad, as E, and constituting the sole support of said pad, substantially as herein described.

2. The combination, in eyeglasses or spectacles, of nose-pads or nose-pieces each consisting of an open ring arranged to bear with its face or flat portion upon the nose, and arms supporting the nose pads at their outer ends and forming the sole supports for the pads, and at their inner ends secured to the posts, whereby the bow-spring is connected with the glasses or lenses by substantially-vertical pivots, so as to swing in a substantially-horizontal plane, as herein described.

3. The combination, in eyeglasses or spectacles, of nose-pads and arms each pivoted at one end to swing in a substantially-horizontal plane transverse to the plane of the glasses or lenses, and at its outer or free end supporting a nose-pad of which it forms the sole support, substantially as herein described.

4. The combination, in eyeglasses or spectacles, of a bow-spring, boxes or other suitable joints receiving the ends of the spring, and nose-pads or nose-pieces each supported by an arm pivoted within a box or joint, the said boxes or joints being provided with cam-surfaces which hold said arms in substantially the same plane with the glasses, and which provide for swinging the arms into planes oblique to the glasses, substantially as herein described.

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Witnesses:

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