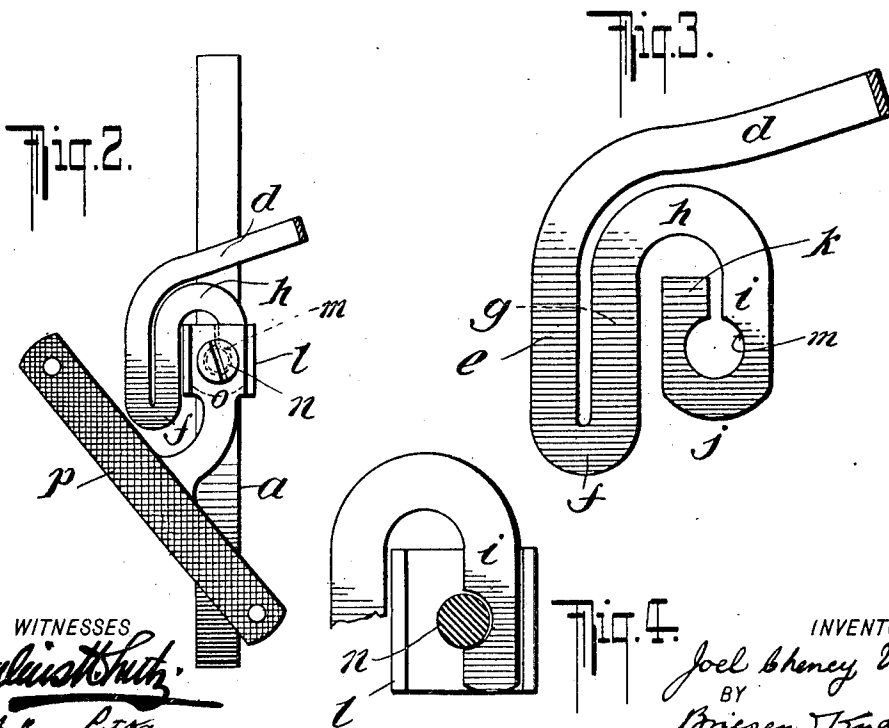
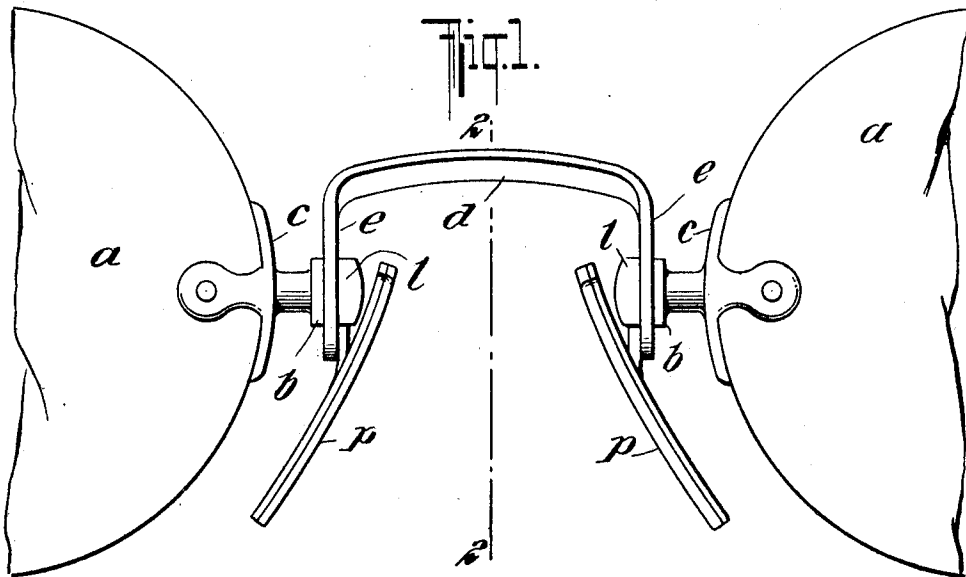


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EYEGLASSES.
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969,819.

Patented Sept. 13, 1910.



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EYEGLASSES.

969,819.

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To all whom it may concern:

Be it known that I, JOEL CHENEY WELLS, a citizen of the United States, and resident of Southbridge, county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Eyeglasses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 represents a rear view of a pair of eye-glasses having my improved spring applied thereto; Fig. 2 represents a cross sectional view thereof, taken on line 2—2 of Fig. 1; Fig. 3 is an enlarged view of the portion of the bow spring shown in Fig. 2, as it appears when detached from the lens-post; Fig. 4 is a modification of my invention as shown in Fig. 3, whereby the final bend and upwardly extending arm are omitted and the spring is secured to the lens-post by the pressure of the screw-head upon the downwardly extending arm *i*.

My invention has particular reference to the eye-glass spring, and has for its object to provide the eye-glasses with a spring which shall have its ends bent in such manner as to produce great resiliency without interfering with the view through or at the eye-glasses.

In the accompanying drawings, *a a* represent the lenses; *b b* represent the lens posts, having straps *c c*, that are fastened to the lenses; *d* represents the arched bow-spring having the downwardly extending arms *e e*, which by outwardly extending bends *f* join the upwardly extending arms *g*, which in turn at their upper ends are joined by outwardly extending bends *h* to downwardly extending arms *i*. The lower ends of the arms *i* are preferably bent rearwardly or inwardly as at *j* and then upwardly forming the terminals *k*. The upper edges of the bends *j* and the opposing edges of the arms *i* and *k* are so shaped by hollowing them out as to produce a rounded opening *m* for the reception of the screw *n* by which the spring is secured to the lens-post.

It will be seen that the series of bends *f h j* and arms *e g i* and *k* lie in planes at right angles to the plane of the lenses, and in a plane with one another. That is to say, the bends *f, h, j* and arms *e, g, i, k* at one end of the spring lie in one plane, and the bends and arms at the other end of the spring lie in another plane parallel to the first, and

both planes are perpendicular to the plane of the lenses.

The ends *i j k* of the spring are inserted between the lips *l l* that project from the lens-posts and are fastened to the lens-posts by the nose guard arms *o* and screws *n* or by screws alone. The nose guards *p* and their arms *o* are of the usual construction.

The form of the spring shown results in giving the eye-glass great resiliency and adapts it to noses of varying forms, distributing the strain in such manner as to always retain the elasticity of the spring. Any strain applied to the bends *f* is not wholly absorbed by these bends *f* but is in part transmitted to the bends *h*. It is of value also that the final or end portion *i j k* of the spring is inserted in the lens-post from above while the nose guard arm *o* is inserted from below, thereby facilitating the assembling of the parts and relieving the screws *n* from straining. The parts *i* and *k* may be joined above the hole *m*, although I prefer the additional elasticity obtained by the spring bend *j* in the form shown.

It will be observed that I employ a plurality of vertical arms at each end of the spring, said arms being connected by bends, some of which (*h*) are located above the level of the lens-post connection and some (*f, j*) below such level. The central or bow portion of the spring is connected at each end with one of said arms by a bend lying close to one of the upper bends *h*.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. In combination with lenses and lens-posts, a bow spring the respective ends of which are attached to the lens posts, each of said ends being formed with vertical arms lying in the same plane perpendicular to that of the lenses and connected by bends, some of which are located above the level of the attaching point of the spring to the post and some below said level.

2. In combination with lenses and lens posts, a bow spring the respective ends of which are attached to the lens posts, each of said ends being formed with vertical arms lying in the same plane perpendicular to that of the lenses and connected by bends located alternately at the upper and the lower ends of said arms, the central portion of the spring being connected with one arm of each

set by a bend lying close to one of the upper connecting bends.

3. In combination with lenses and lens posts, a bow spring the respective ends of which are attached to the lens posts, each of said ends being formed with arms lying behind the lens posts in the same plane perpendicular to that of the lenses and connected by bends some of which are located above the level of the attaching point of the spring to the post and some below said level, the central portion of the spring being connected with one arm of each set by a bend lying close to one of the upper connecting bends.

4. In combination with lenses, posts and straps for eye-glasses, a bow-spring having folds at each end formed by shaping said spring from its central portion rearwardly and downwardly, thence forwardly and upwardly, thence forwardly and downwardly, thence by another bend upwardly, substantially as described.

5. In combination with lenses, posts and

straps for eye-glasses, a bow-spring having a plurality of folds formed by shaping said spring from its central portion rearwardly and downwardly, thence forwardly and upwardly, thence forwardly and downwardly, thence by another bend upwardly, all said folds lying in the same plane, substantially as described.

6. In combination with lenses, posts and straps for eye-glasses, a bow-spring having a plurality of folds by shaping said spring from its central portion rearwardly and downwardly, thence forwardly and upwardly, thence forwardly and downwardly, to the lens post all said folds lying in the same plane, and terminating at the lens-posts substantially as described.

In testimony whereof, I have affixed my signature to this specification in the presence of two subscribing witnesses.

JOEL CHENEY WELLS.

Witnesses:

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