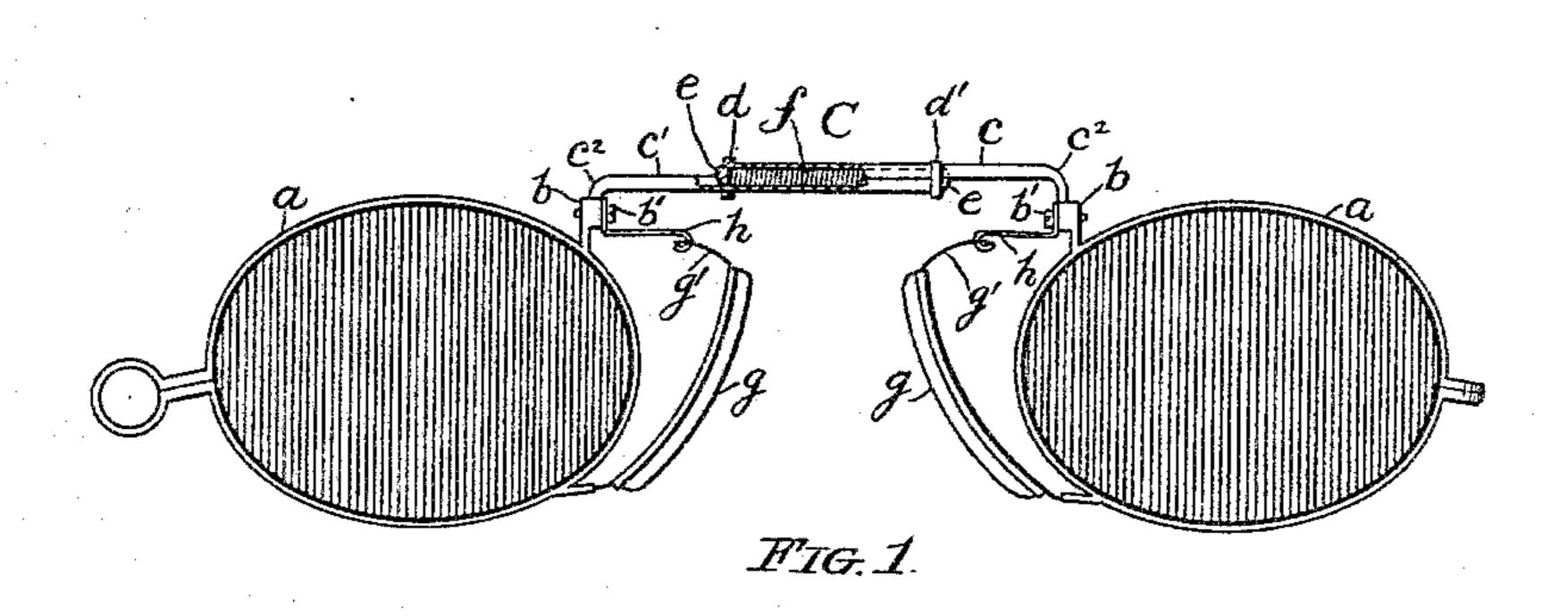
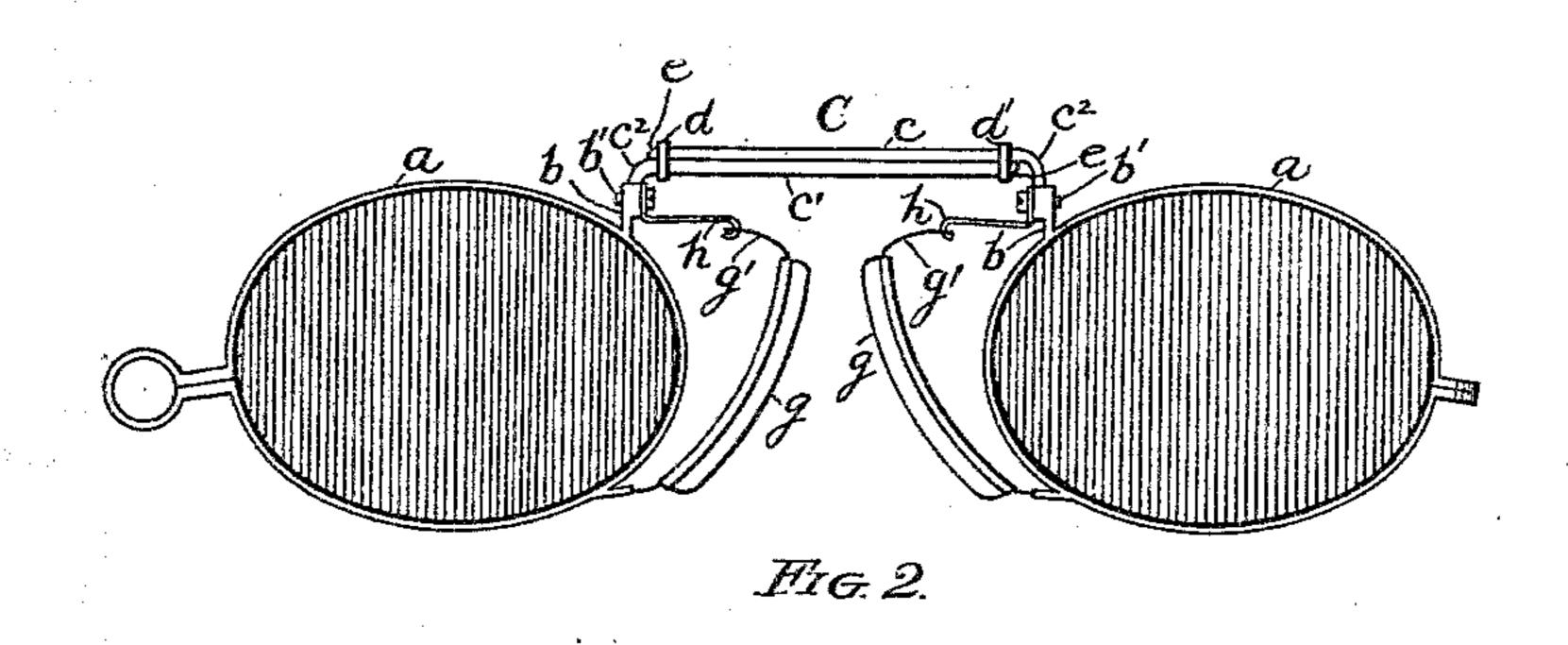
J. CURRIN.

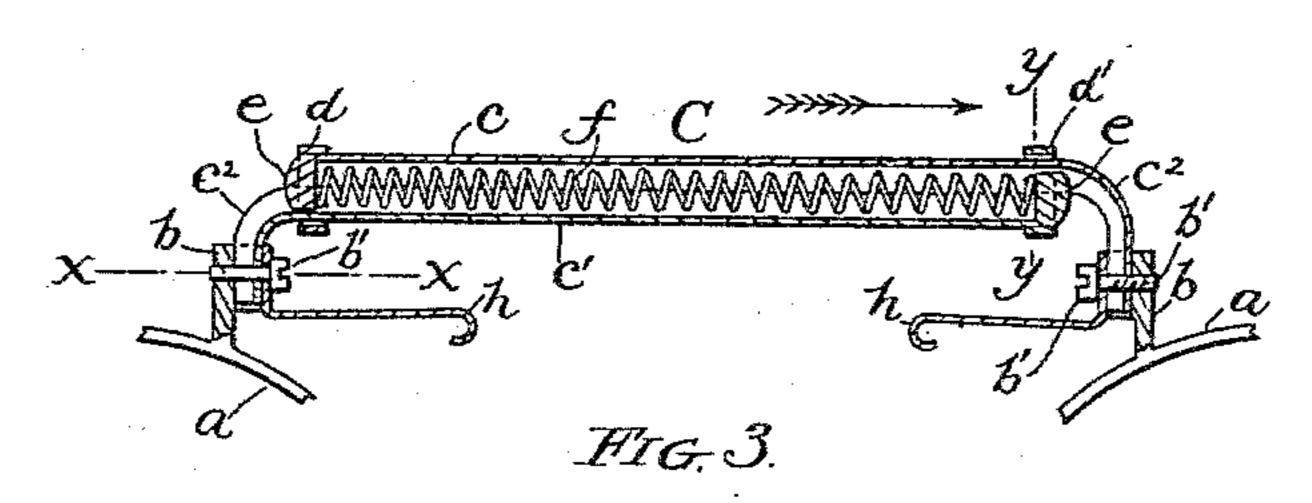
EYEGLASSES.

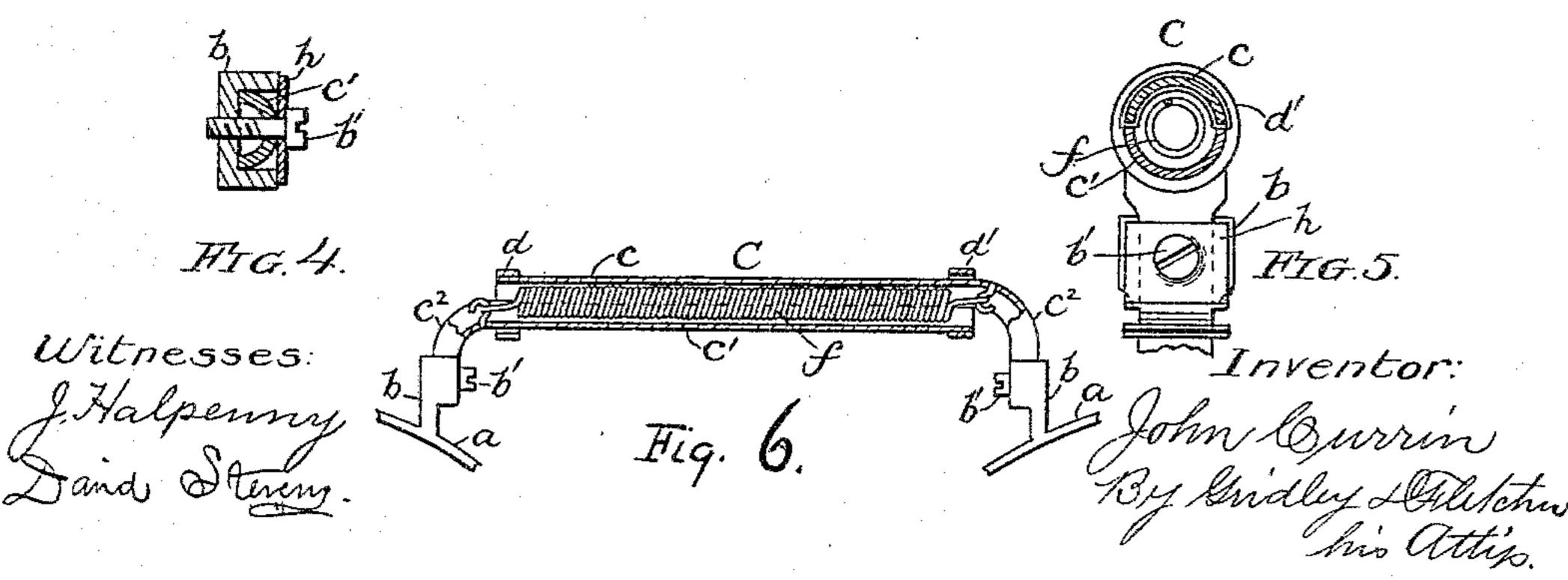
No. 412,239.

Patented Oct. 8, 1889.









United States Patent Office.

JOHN CURRIN, OF SOUTHBRIDGE, MASSACHUSETTS, ASSIGNOR TO FRANCIS
A. HARDY, OF CHICAGO, ILLINOIS.

EYEGLASSES.

SPECIFICATION forming part of Letters Patent No. 412,239, dated October 8, 1889.

Application filed June 15, 1889. Serial No. 314,476. (No model.)

To all whom it may concern:

Be it known that I, John Currin, of Southbridge, in the county of Worcester and 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, forming a part of this speci-

fication, in which—

10 Figure 1 is a front view of said glasses as they appear when the frame is expanded. Fig. 2 is a like view showing the parts in a normal position. Fig. 3 is an enlarged vertical longitudinal sectional view in detail of a portion of the adjustable frame, showing the spring therein fully expanded. Fig. 4 is an enlarged sectional view in detail, taken upon the line x x, Fig. 3. Fig. 5 is an enlarged sectional view taken upon the line y y, Fig. 3, viewed in the direction of the arrow there shown; and Fig. 6 is a longitudinal sectional view in detail, showing a modification of said invention.

Like letters of reference in the different

25 figures indicate like parts.

My invention consists in the manner of constructing an eyeglass-frame so as to render it adjustable to the nose, and at the same time conceal the adjusting-spring and render the whole cheap in construction, as well as neat,

light, and simple in appearance.

To these ends my invention consists in the combination of elements hereinafter more particularly described and claimed, and which is an improvement upon Letters Patent Nos. 373,349 and 373,350, dated November 15, 1887, as well as upon a construction sold and used in the United States for more than four years past, in which the parts of the frame within which the respective lenses are mounted are connected to each other by means of flat parallel bars placed side by side and loosely attached to each other, one of which is surrounded by a flattened spiral adjusting-spring, the ends of which bear against stops attached to and connecting said bars.

Referring to the drawings, a a represent the usual bows or lense-frames, upon which are formed lugs b b, which serve as attachments for the intermediate adjustable frame C, by which the lenses are connected. Said

connecting-frame consists of two hollow semicylindrical sheet-metal bars or split tubes cc', which are bent downwardly near their outer ends, as shown at $c^2 c^2$, said ends, respectively, 55 being detachably secured to the lugs b b by means of screws b' b'. A ring or clasp d is rigidly attached to the end of the bar c, while a like ring d' is secured to the end of the bar c', said rings, respectively, being passed 60 loosely around the bar contiguous to that to which each is permanently secured, thus loosely binding said bars together, so that they may slide upon each other in parallel lines and form a hollow cylinder or split tube, 65 the ends of which are closed, preferably, by bending the respective bars, as shown at e e. Within the split tube formed by the bars c c', I place a spiral spring f, the ends of which bear against the parts ee, thereby separating 70 them and normally holding the bars c c' in the position represented in Figs. 2 and 3. Upon grasping the outer ends of said bars or the frames a a and drawing them apart the spring f is compressed and the nose-pieces g g are 75 separated sufficiently to adjust the glasses to the desired position, in which they are held by the recoil of the spring f.

The self-adjusting nose-pieces g g are provided with the usual bent and slotted strips 80 g' g', which engage loosely with hooks h h, the bodies of which are bent, as shown, and detachably secured to the frame by means of

the screws b' b'.

It is obvious that the spring f may be nor-85 mally compressed, as shown in Fig. 6, and one end attached to the bar c at or near the bend c^2 and the other to the bar c' at or near its bend, in which case the spring would pull instead of push the parts into a normal position. This I regard as the equivalent of the construction above described. In case the latter form be adopted the parts e e may be dispensed with.

The advantages of my improvement are 95 that it permits the cost of construction to be materially reduced, enables the adjusting-spring to be hidden and protected from the accumulation of dirt between the coils of the spring, which, if exposed, renders it unsightly, 100 and presents a neat, attractive, and workman-

like appearance.

Having thus described my invention, I claim—

1. An automatically-adjustable frame for eyeglasses, consisting of the combination of two sections of a split tube—one attached to each lens—said sections being arranged parallel and loosely attached to each other by means of a sliding contact and a spiral spring interposed in the tubular space between them, substantially as shown and described.

2. The combination, in an eyeglass-frame, of split tubes attached to the respective lenses and arranged in sliding contact with each other, their concave faces being contiguous, stops or bearings *e e* at the respective ends, and inclosed spring *f*, substantially as shown and described.

3. The combination, in an eyeglass-frame,

of the bars cc', loosely attached to each other and arranged with their hollow faces contiguous and in sliding contact, means for detachably securing the protruding ends of said bars to the lenses, respectively, and a spiral spring interposed between said hollow faces and in operative contact with said bars, whereby the 25 action of said spring may tend to draw said lenses toward each other in a straight line or permit them to be separated, substantially as shown and described.

In testimony whereof I have signed this 30 specification, in the presence of two subscribing witnesses, this 25th day of May, 1889.

JOHN CURRIN.

Witnesses:

E. A. WELLS, JOHN A. HALL.