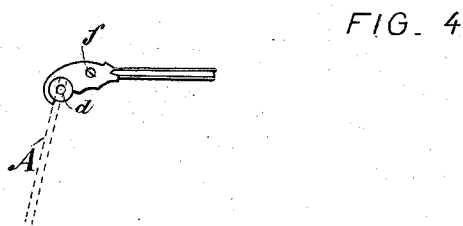
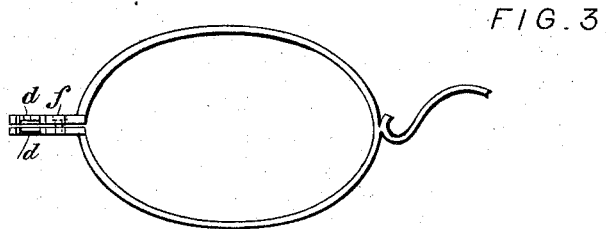
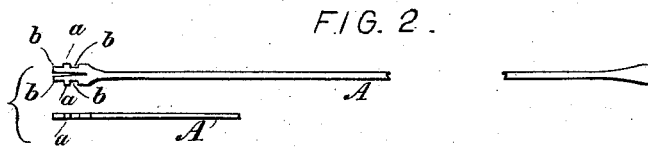
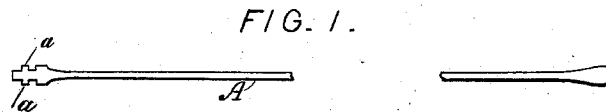


J. S. SPENCER.
Spectacle-Bow Hinge.

No. 217,420.

Patented July 8, 1879.



WITNESSES:

Marcus P. Bertow
W. R. Jenston

INVENTOR:

John S. Spencer

UNITED STATES PATENT OFFICE.

JOHN S. SPENCER, OF NEW YORK, N. Y.

IMPROVEMENT IN SPECTACLE-BOW HINGES.

Specification forming part of Letters Patent No. **217,420**, dated July 8, 1879; application filed June 4, 1879.

To all whom it may concern:

Be it known that I, JOHN S. SPENCER, of the city of New York, in the State of New York, have invented a new and useful Improvement in the Hinge of Spectacle-Bows, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to cause the bow to retain until worn out the same firmness and accuracy of movement as when new, and prevent it from becoming loose by wear.

The end of the bow-piece designed to work as a hinge is placed under a die, and cut in the form of a Maltese cross, as shown in Figure 1. The middle of the upright A is then sawed out to a certain distance below the arms *a a*, as shown in Fig. 2, leaving the two sides *b b*, which are spread a little, forming two distinctive springs. When placed in the socket of the spectacle-frame the arms *a a* fit in the pin-holes *d d*, Figs. 3 and 4, forming the turning-pin for the hinge and holding the bow in its place. The springs *b b b b* pressing against

the sides of the socket prevent the bow from becoming loose from wear.

The end of the spectacle-frame containing the socket is made in two pieces, for convenience of admitting the arms *a a* to the pin-holes, and then brought together by a screw at *f*, Figs. 3 and 4.

It will be evident that by the constant outward pressure of the springs *b b b b*, and the arms *a a* being of the same piece as these springs, the bow will retain its original adjustment and regularity of movement, and the process is simpler than the ordinary method of swaging up the end of the bow and then drilling a hole and putting in a pin.

I claim as my invention—

The springs and pins cut from the same piece of steel, by which the bow is held firmly in place without swaging and without separate pin, substantially as described.

JOHN S. SPENCER.

Witnesses:

MARCUS P. BESTOW,
W. R. DENSLOW.