

(No Model.)

S. N. STONE.  
SPECTACLES.

No. 557,448.

Patented Mar. 31, 1896.

Fig. 1.

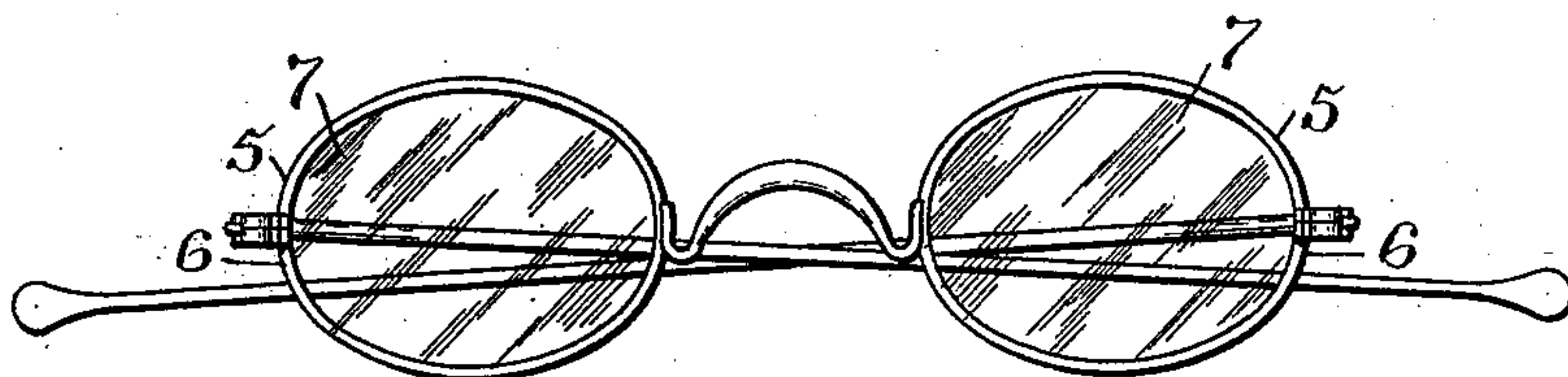


Fig. 2.

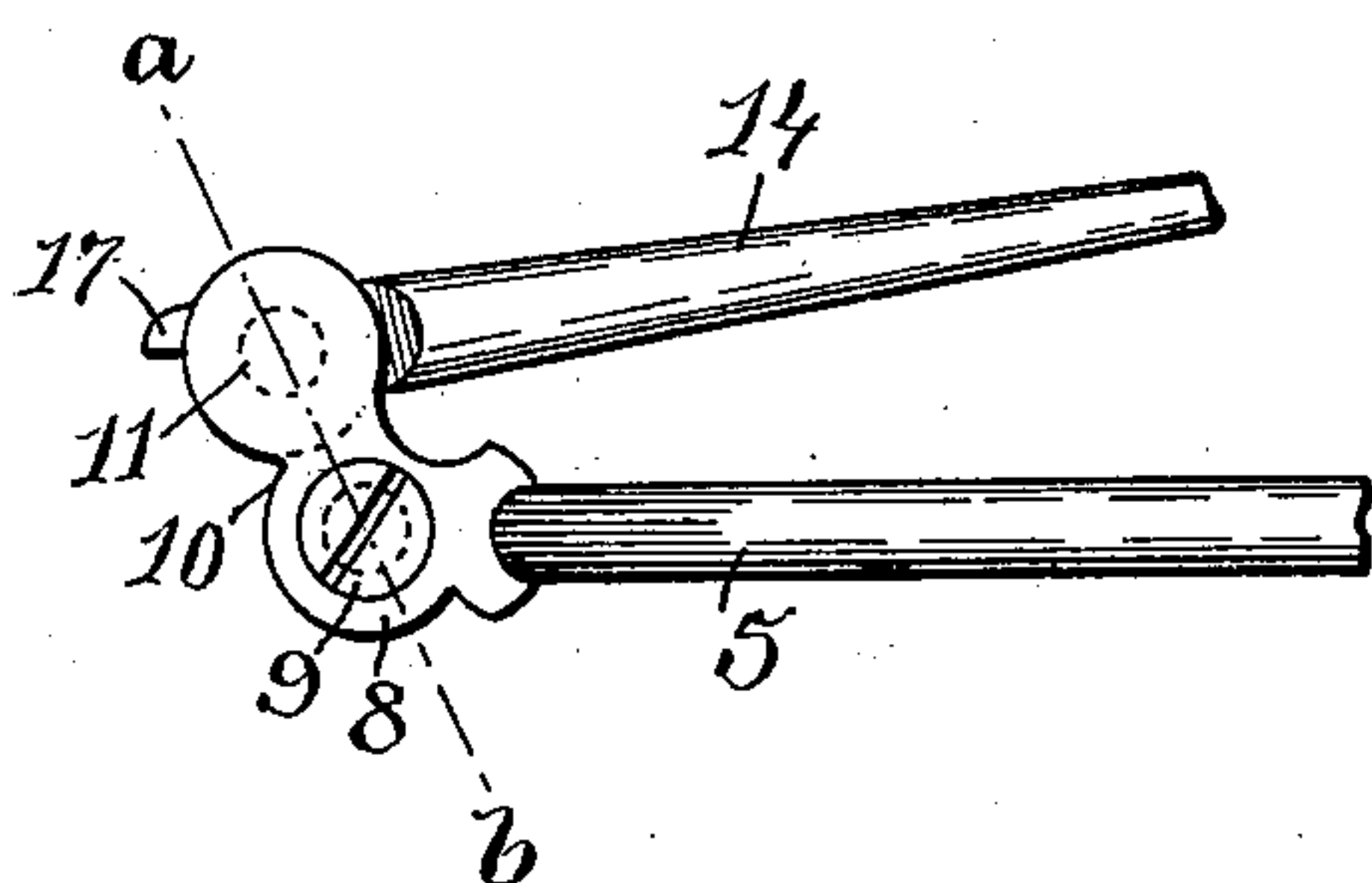


Fig. 3.

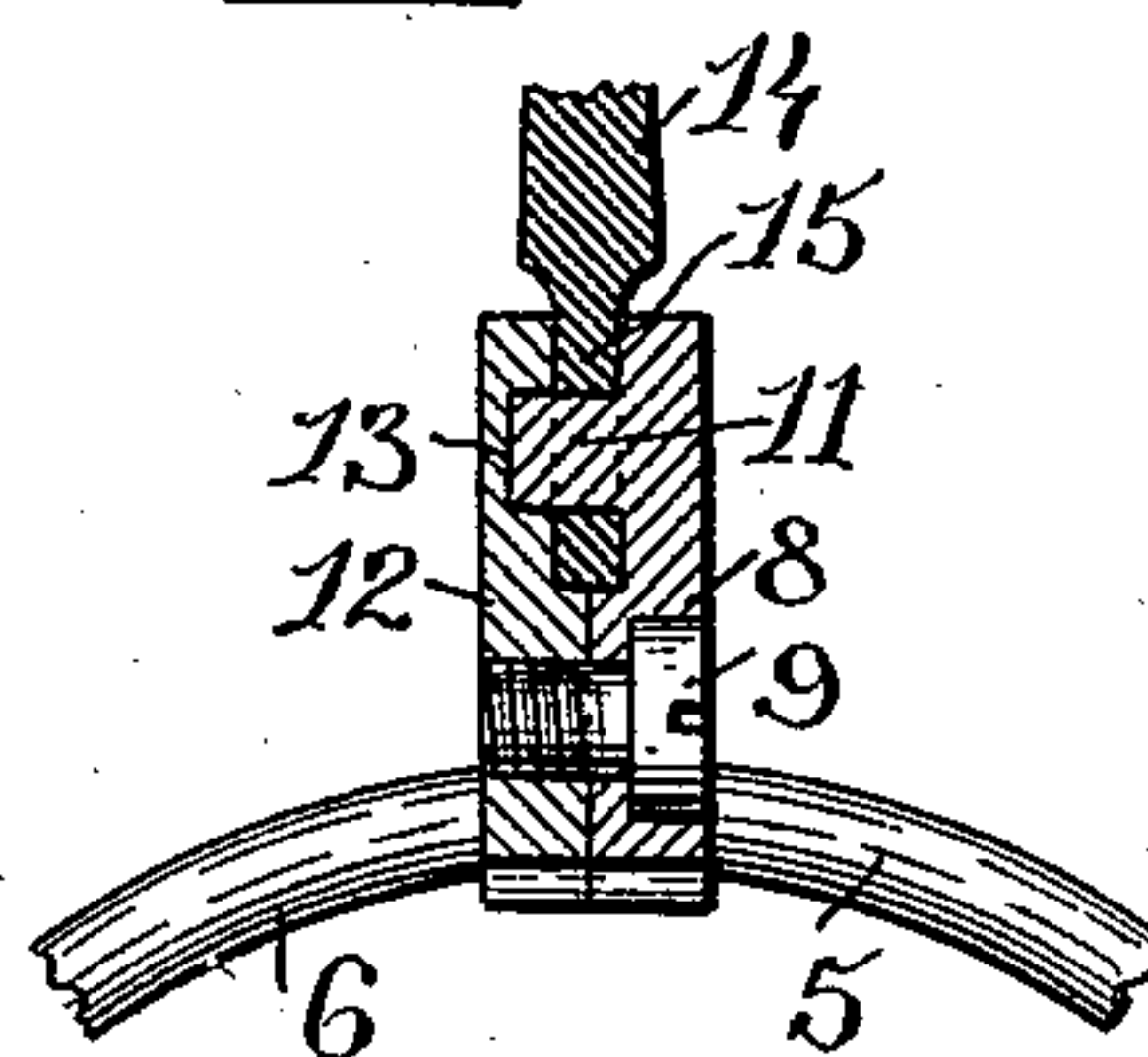
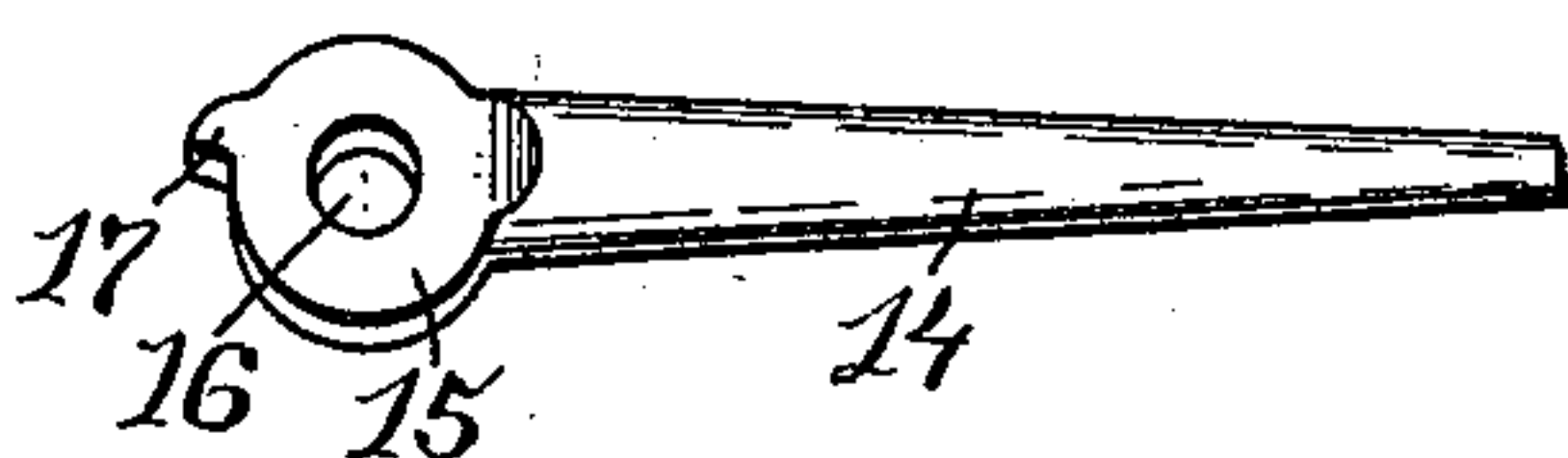


Fig. 4.



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

SAMUEL N. STONE, OF ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR TO  
MACE B. SHORT, PETER NERNEY, AND JAMES J. HORTON, OF SAME  
PLACE.

## SPECTACLES.

SPECIFICATION forming part of Letters Patent No. 557,448, dated March 31, 1896.

Application filed March 21, 1894. Serial No. 504,504. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL N. STONE, of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain  
5 new and useful Improvements in Spectacles; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

10 This invention has reference to improvements in spectacles, and relates particularly to the means for attaching the bows to the rims.

The object of the invention is to dispense  
15 with the screw-pivot by means of which the bows are pivoted to the rims.

Another object of the invention is to simplify the construction of the spectacles and to reduce the cost of the same.

20 Still another object is to secure a better bearing for the pivoted ends of the bows.

I provide one part of the rim with a plate having a perforation near the rim and an inwardly-projecting stud at its outer end portion, and the other part of the rim with a  
25 plate having a screw-threaded perforation near the rim and a recess near its outer end into which the stud of the corresponding plate may enter.

30 The invention consists in such novel features of construction and combination of parts as are hereinafter more fully described, and pointed out in the claim.

Figure 1 represents a view of a pair of spectacles furnished with the improved pivoting  
35 device. Fig. 2 represents an enlarged view of parts of the same. Fig. 3 represents a cross-sectional view of the same, taken on a line *a b*, Fig. 2. Fig. 4 represents an enlarged view  
40 of the end portion of the bow.

Similar numbers of reference designate corresponding parts throughout.

Spectacles as heretofore constructed have had the joint-pieces in which the bows are  
45 hinged provided with a screw for securing the two parts of the joint-pieces together and with a pivot on which the end of the bow is pivoted. These pivots have been usually made to extend through one or both of the  
50 joint-pieces, and when made so as not to extend through these pieces they were made in

two short trunnions formed integral, one with each of the two joint-pieces. When extending through one or both of the joint-pieces they form a circular opening in which dirt  
55 collects, and in plated goods exposes the edge of the plating to corrosion, and when made with two short trunnions the bearing of the hinged end of the bow is not sufficiently firm and the bow end has to be provided with a  
60 segmental plate bearing on the edges of the two joint-pieces, which is difficult of construction and expensive.

In carrying my invention into practice my desire has been to overcome these and similar  
65 objections. In doing so I construct the frame of the upper and lower members 5 and 6 having concave inner surfaces adapted to receive the edge of a glass 7. Extending from the end of the member 5 is a plate 8 having  
70 a countersunk perforation to receive the headed end of the fastening-screw 9. This portion of the plate has also a curved shoulder 10. The outer end portion of this plate is reduced in thickness on its inner surface, and  
75 extending from this thinner portion is the pivot-stud 11 formed in part with the plate. To the member 6 is secured the plate 12, of a shape similar to the plate 8 and having a curved shoulder corresponding to that marked  
80 10 and a perforation to receive the threaded end of the screw 9. Beyond this shoulder the inner surface of this plate is likewise reduced in thickness, and opposite the pivot-stud 11 is formed a depression 13 for receiving the  
85 end of this stud when the two plates are secured together by the screw 9. The end of the bow 14 is furnished with a flattened end 15, having the perforation 16 and the stop 17. When the pivot-stud 11 is passed through  
90 this perforation and the plates 8 and 12 are drawn together by the screw 9, the end of the pivot entering the recess 13, the flattened portion 15 of the bow is free to move between the reduced portions of the plates 8 and 12.  
95

To secure a clean finished edge to the hinge, a more substantial connection of the bow with the hinge-block, and save the expense of the former construction, in which a segmental  
100 piece is secured to the hinged end of the bow to form a stop and to cover the joint, I make the hinge end 15, of the bow 14, of practically



circular form and of uniform thickness and provide the same with the projecting stop 17, and I make the hinge end of the plates 8 and 12 also of practically circular form and of the same size as the circular end 15 of the bow, so that when secured together a very broad bearing is given to the hinge and the intersection of the circular hinged end with the joint end at 10 forms a shoulder against which the stop 17 bears when the bows are open, the whole forming a much more durable hinge at less cost.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In spectacles, the combination with the ends of the lens-rim, of the plate 8 having the pivot-

stud 11 formed integral therewith, the plate 12 having the depression 13, both plates 8 and 12 being of practically circular outline at the hinge end, the bow 14 the end of which is formed into the flattened circular and perforated disk 15, and the stop 17 formed integral with the bow, and cooperating with the outside edge of the hinge-plates whereby a wide bearing for the pivotal connection of the bow with the clamps is secured, as described.

In witness whereof I have hereunto set my hand.

SAMUEL N. STONE.

Witnesses:

JOSEPH A. MILLER,

JOSEPH A. MILLER, Jr.