

No. 635,216.

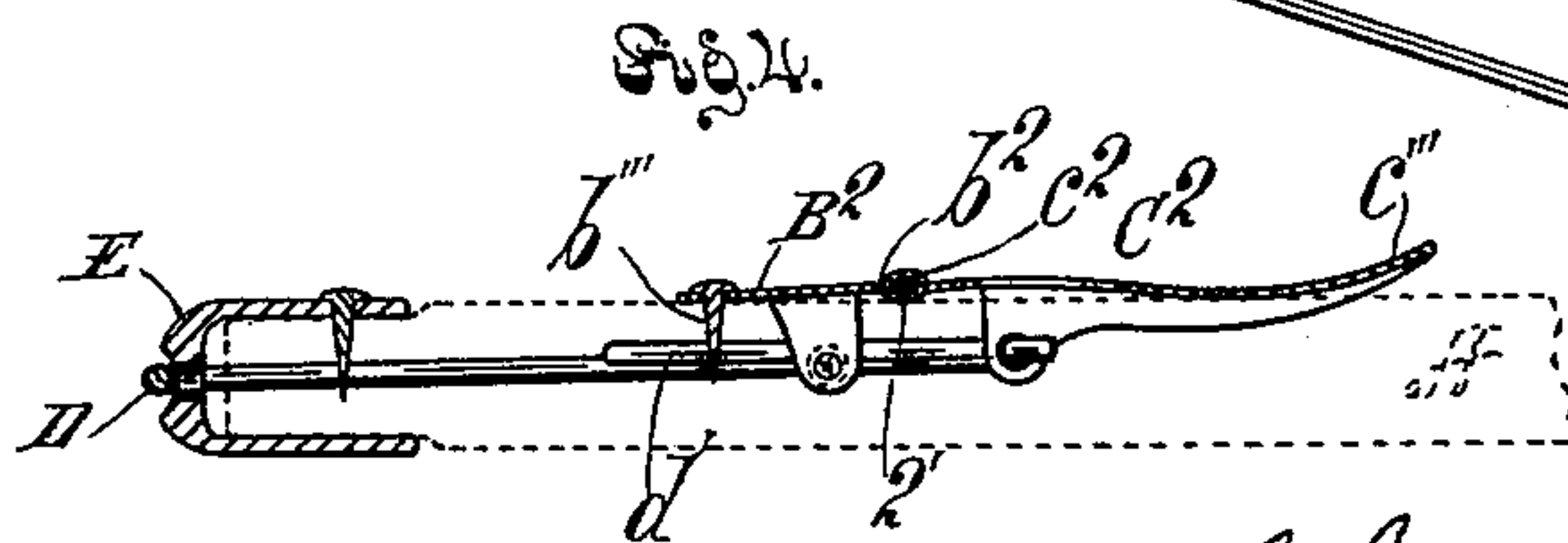
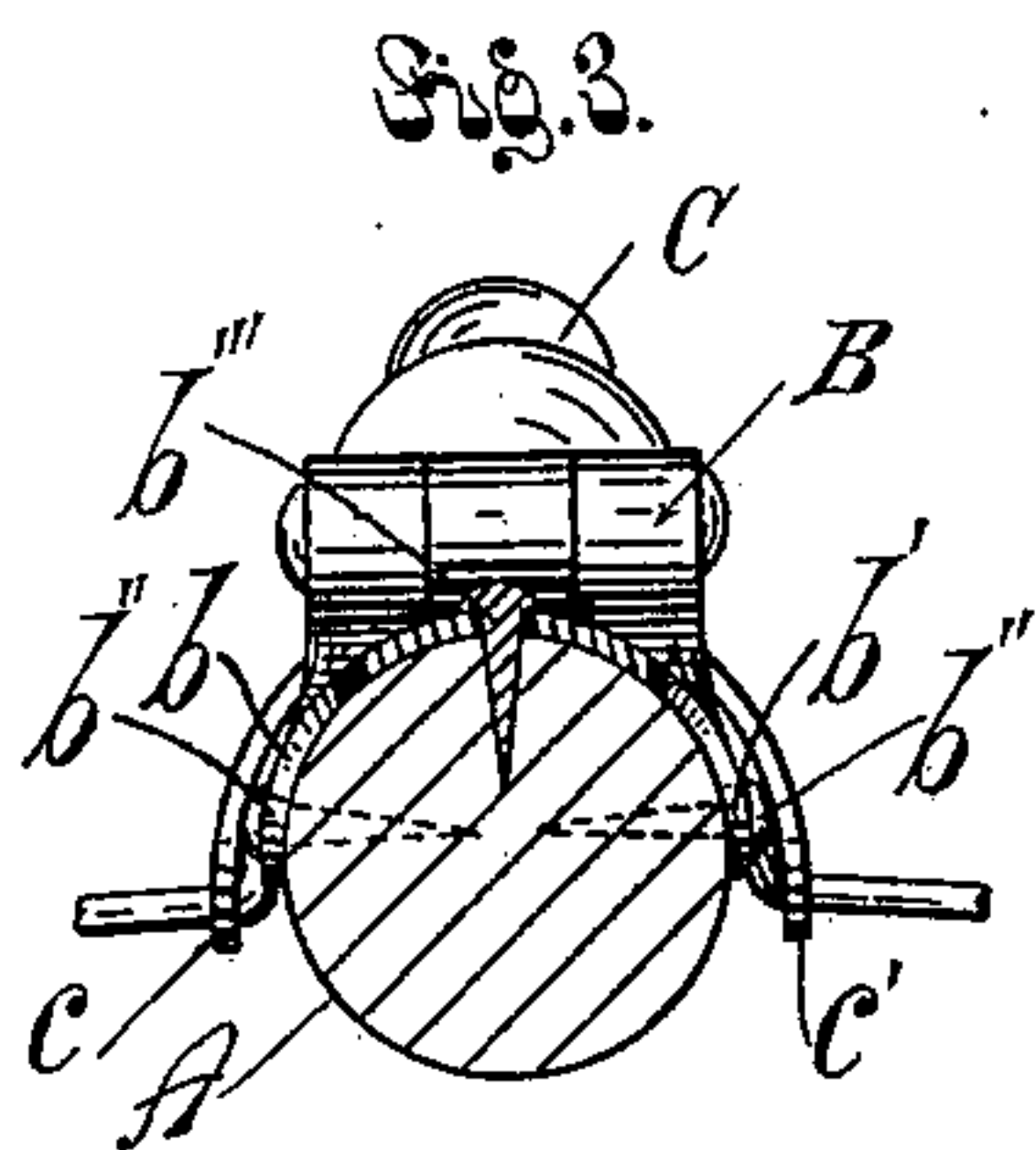
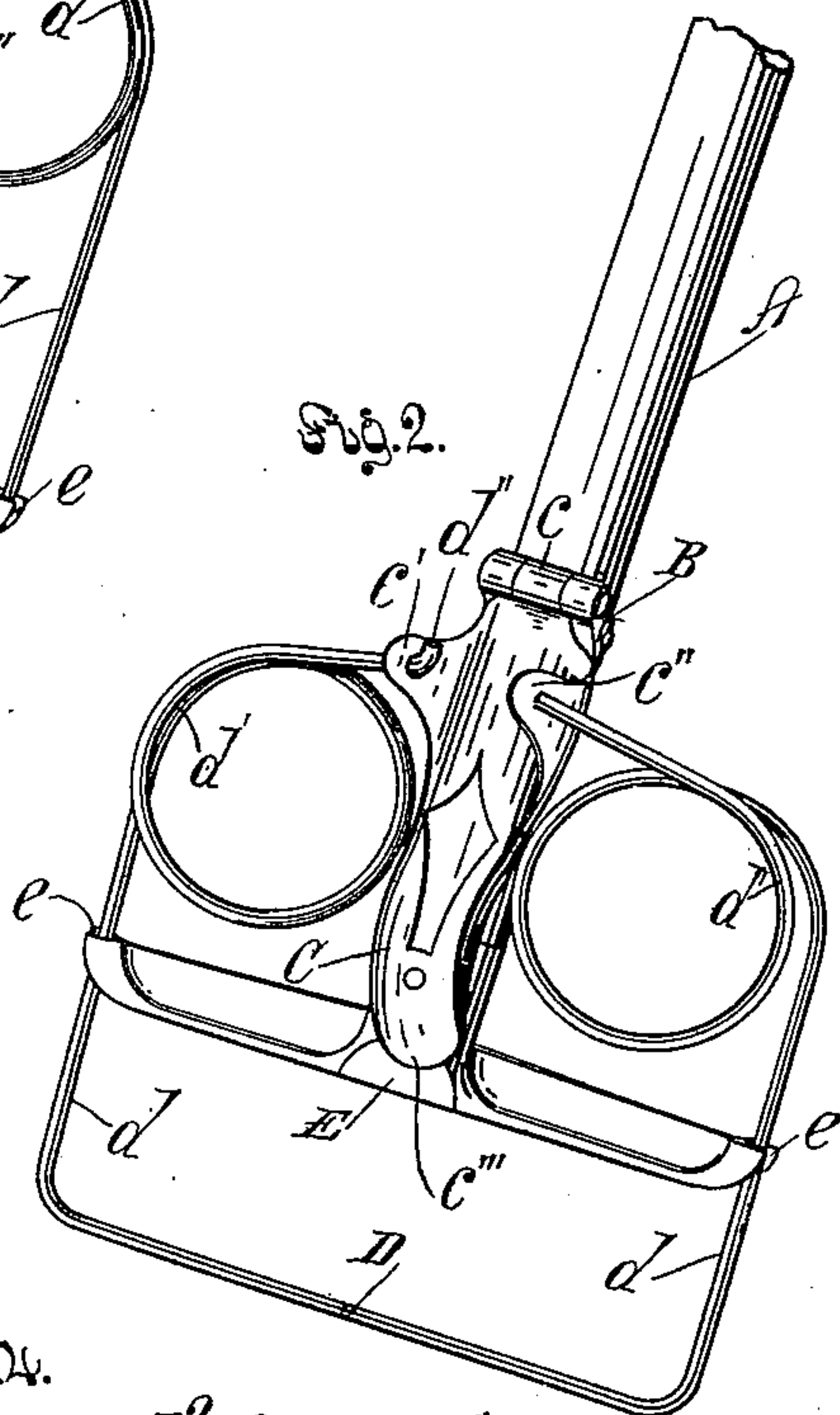
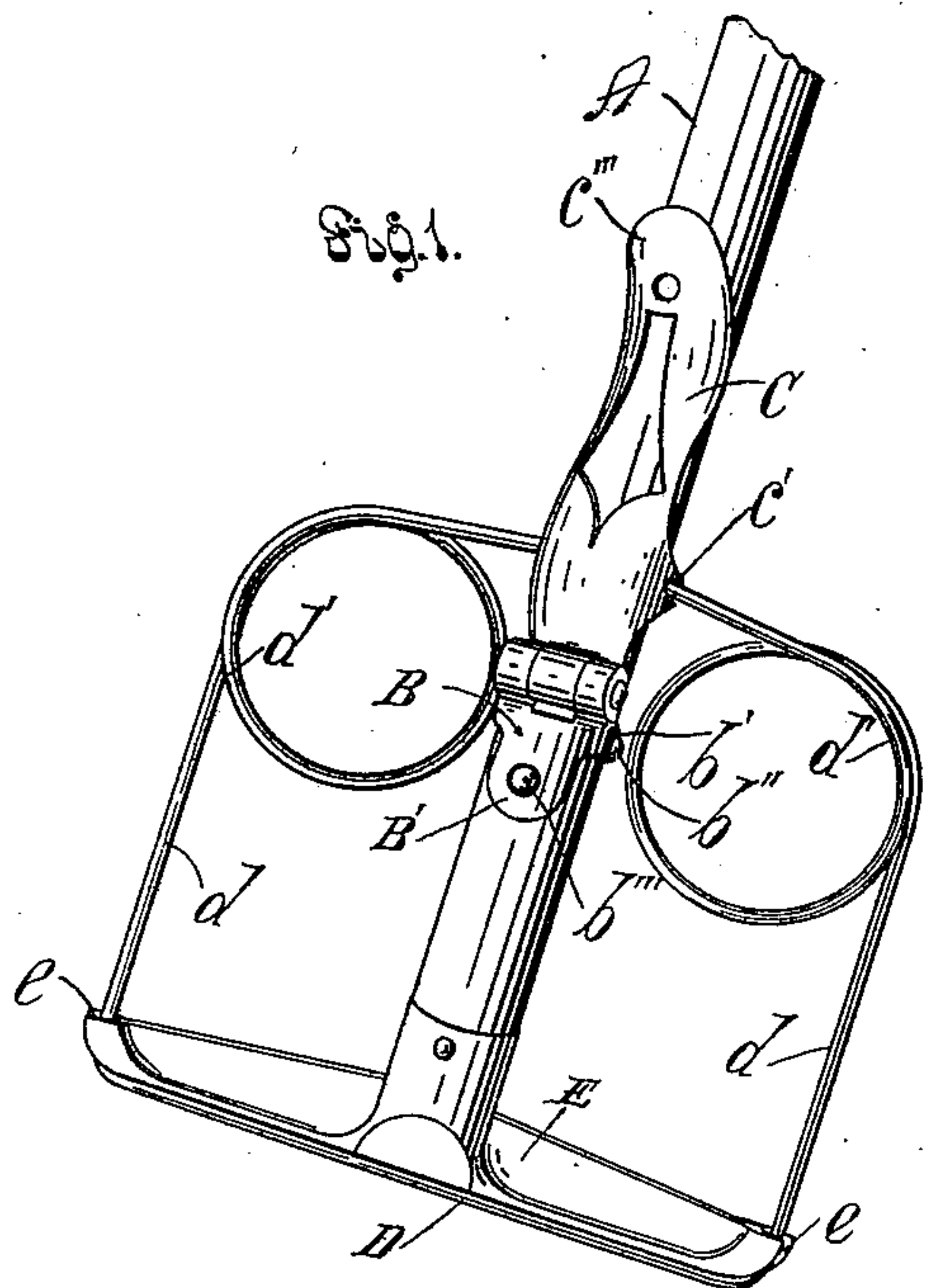
Patented Oct. 17, 1899.

C. M. WILLIAMS.

MOP HEAD:

(Application filed Jan. 4, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

CHARLES M. WILLIAMS, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO THE
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MOP-HEAD.

SPECIFICATION forming part of Letters Patent No. 635,216, dated October 17, 1899.

Application filed January 4, 1899. Serial No. 701,155. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. WILLIAMS, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Mop-Heads, of which the following is a specification.

My invention relates particularly to that class of mop-heads having a cross-head and a loop having its side members working in guides in the cross-head and actuated by means of a locking-lever pivoted to the handle of the mop. It is of course to be understood that when a cloth of excessive thickness is placed in the loop and the lever is actuated to draw the loop against the cross-head great strain is placed upon the lever and upon the pivotal fastening whereby it is secured to the handle.

The particular object of my invention is to provide a hinge-clip whereby to secure the locking-lever pivotally to the handle in a simple and expeditious manner and in such a manner that there will be no possibility of the clip working loose under any strain which can be placed upon it through the medium of the locking-lever.

A further object of my invention is to provide a clip locking-lever which can be easily stamped from sheet metal with much less labor and expense than has heretofore been necessary and, as hereinbefore stated, to provide means for its rigid attachment to the handle.

My invention comprises the various features of construction and combinations of parts hereinafter fully set forth and claimed.

The accompanying drawings illustrate my invention.

Figure 1 is a fragmental perspective view of a mop provided with my invention. In this view the locking-lever is shown in its closed position. Fig. 2 is a like view showing the locking-lever in its open position. Fig. 3 is a sectional view through the handle and the clip, showing the improved fastening whereby I secure the clip rigidly to the handle. Fig. 4 is an axial section of a preferred form. The handle is indicated in dotted lines.

In the drawings, A is the handle of the mop.

B is my improved hinge-clip, which is formed of sheet metal and is provided with a centrally-arranged rearwardly-projecting perforated ear B' and two side ears *b b'*, bent downward and each provided with a perforation, the two ears being arranged to embrace between them the handle A of the mop. A fastening, such as a small nail *b''*, is driven through each perforation in the side ears and into the handle, and preferably a third fastening *b'''* is driven through the perforation in the central ear and into the handle. By this means I provide three points of attachment for the hinge-clip, the central fastening *b'''* being arranged to sustain rearward thrust of the locking-lever and the two side fastenings *b''* not only resisting rearward thrust of the hinge-clip, but also resisting the upward strain thereagainst when the lever is thrown from its open position into its closed position.

C is the locking-lever, which is preferably formed of sheet metal stamped into shape. It is hinged at *c* at its lower end to the hinge-clip B and is provided with two perforated ears *c' c''*, adapted to extend on each side of the handle when the locking-lever is thrown into its closed position, as shown in Figs. 1, 3, and 4, thus to bring the perforation of the ears nearer the axis of the handle than is the axis of the hinge *c*. The lever is curved in cross-section to embrace the handle and is curved outward at the free end, as at *c'''*, to afford a handle by which to throw it out from the mop-handle to open the loop which holds the mop-cloth.

D is the mop-cloth loop, which has its side members *d* working in guideways *e*, which are provided in the ends of the cross-head E, which is secured upon the end of the handle. This loop has its side members provided with the ordinary spring-coils *d'* to allow for any inequality in the thickness of the cloth which is gripped between the loop and the cross-head and has the ends *d''* of its side members passed through the perforated ears or lugs *c' c''* and pivotally secured therein by any suitable means, such as by bending the ends over, as shown at *d'''* in Fig. 2. The pivots *d'''* of the loop are thus arranged so that when the locking-lever C is in closed position, as shown in Figs. 1 and 4, the pivots will be nearer the

axial plane of the handle than is the hinge *c*, so that the tension of the springs holds the lever in locked position.

In practical operation the parts are secured in the position shown in the drawings, and when it is desired to place the mop-rag in position the locking-lever is thrown downward, as shown in Fig. 2. Then the mop-cloth is passed through the loop in the ordinary manner and the lever is thrown upward, the three points of fastening of the hinge-clip sustaining the clip against the upward and rearward thrust of the lever as it is swung into its locking position and absolutely preventing the clip from working loose. The tension of the springs operating on the lugs *c'* *c''* holds the locking-lever firmly closed.

In Fig. 4 the clip *B*² is perforated at the end, as at *b*², and the locking-lever *C*² has a tongue *c*², which is passed therethrough and bent around the bar 2' of the clip to form the hinge.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a mop-head, the combination set forth of the handle; the hinge-clip having perforated ears bent downward to embrace the handle between them; the fastenings driven through the perforations in the ears and into the handle; the locking-lever formed of sheet metal hinged at one end to the hinge-clip and provided with downwardly-projecting perfo-

rated ears adapted to extend on each side of the handle when the lever is in its closed position; the cross-head secured to the end of the handle; and the loop having its side members working in the cross-head and its ends passed through the perforations in the ears of the lever and pivotally secured therein.

2. In a mop-head, the combination set forth of the handle; the hinge-clip formed of sheet metal having an ear provided with a central perforation and provided with two, downwardly-projecting perforated ears arranged to extend on each side of the handle; fastenings driven through the perforations in the ears and into the handle; a fastening driven through the central perforation into the handle; a locking-lever formed of sheet metal, hinged at one end to the hinge-clip and provided with two downwardly-projecting perforated ears adapted to embrace the handle between them when the lever is in its locked position; the cross-head secured to the end of the handle; the loop having its side members working through the guides in the cross-head and having its ends passed through the perforated ears of the lever and bent to prevent their withdrawal.

CHAS. M. WILLIAMS.

Witnesses:

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