

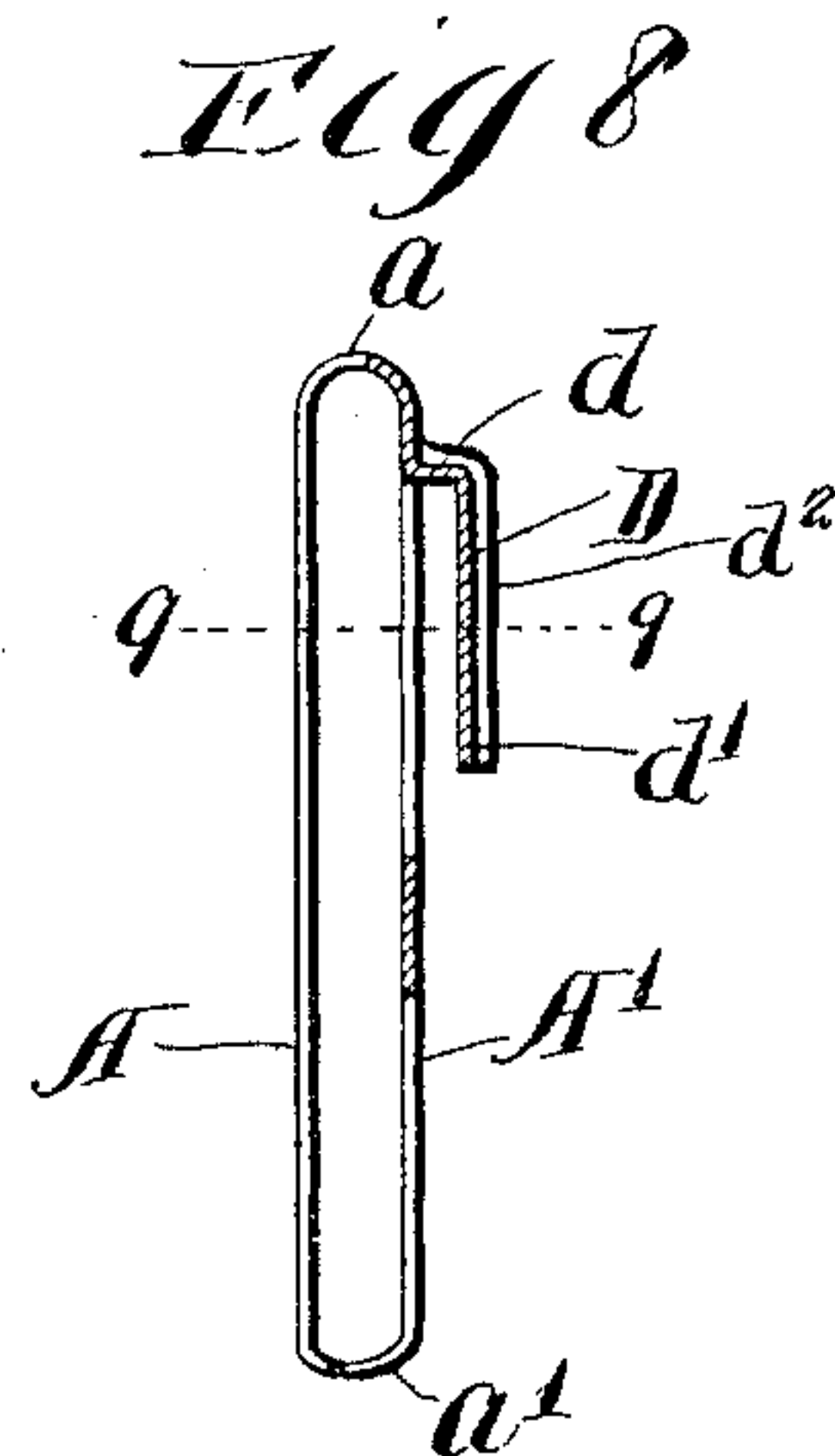
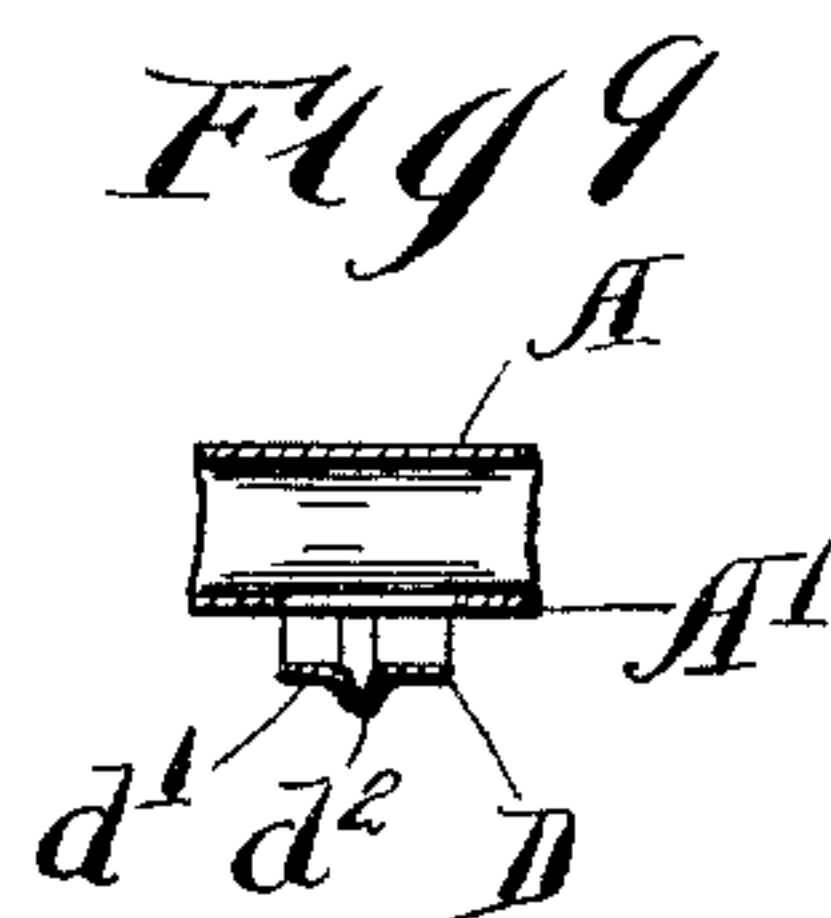
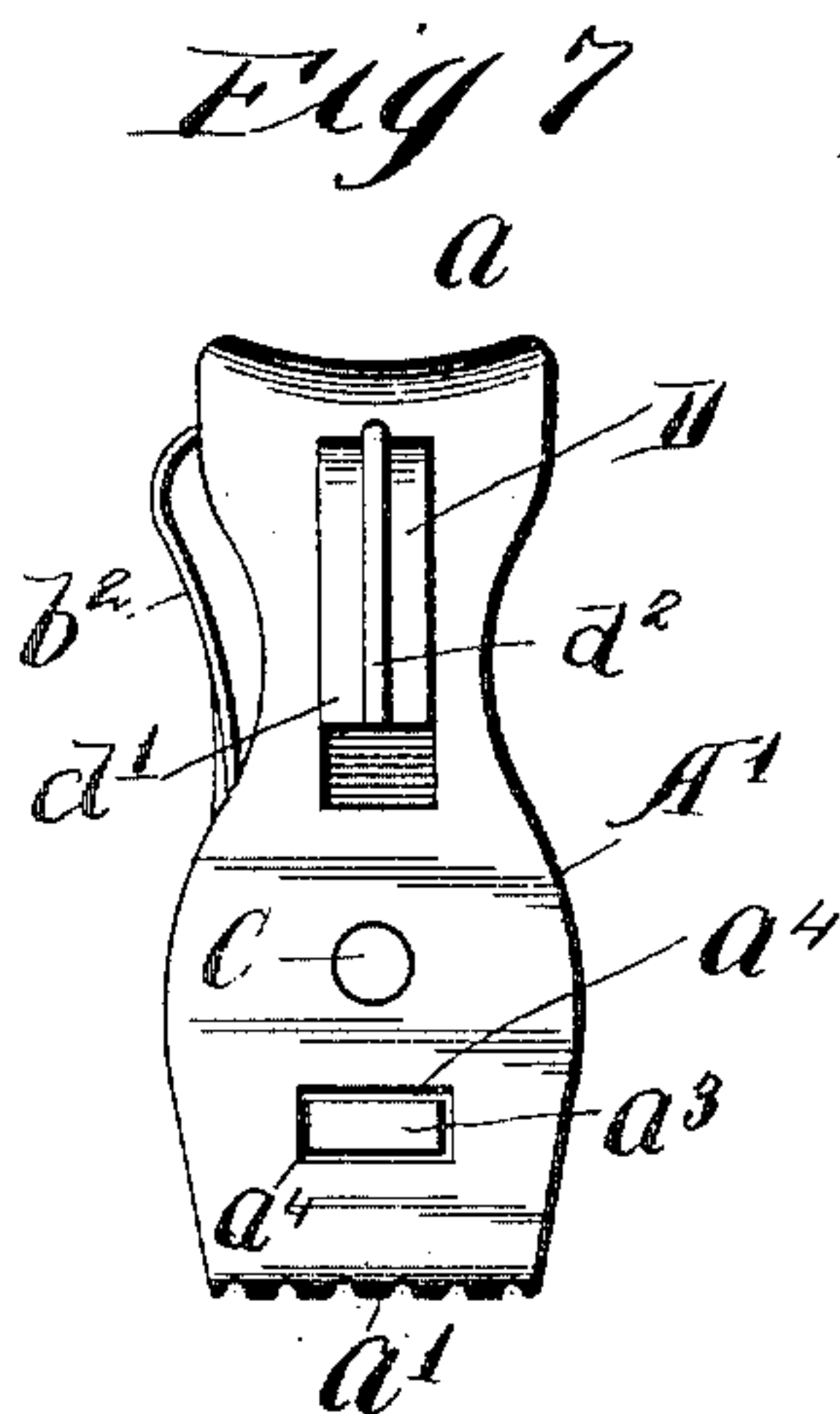
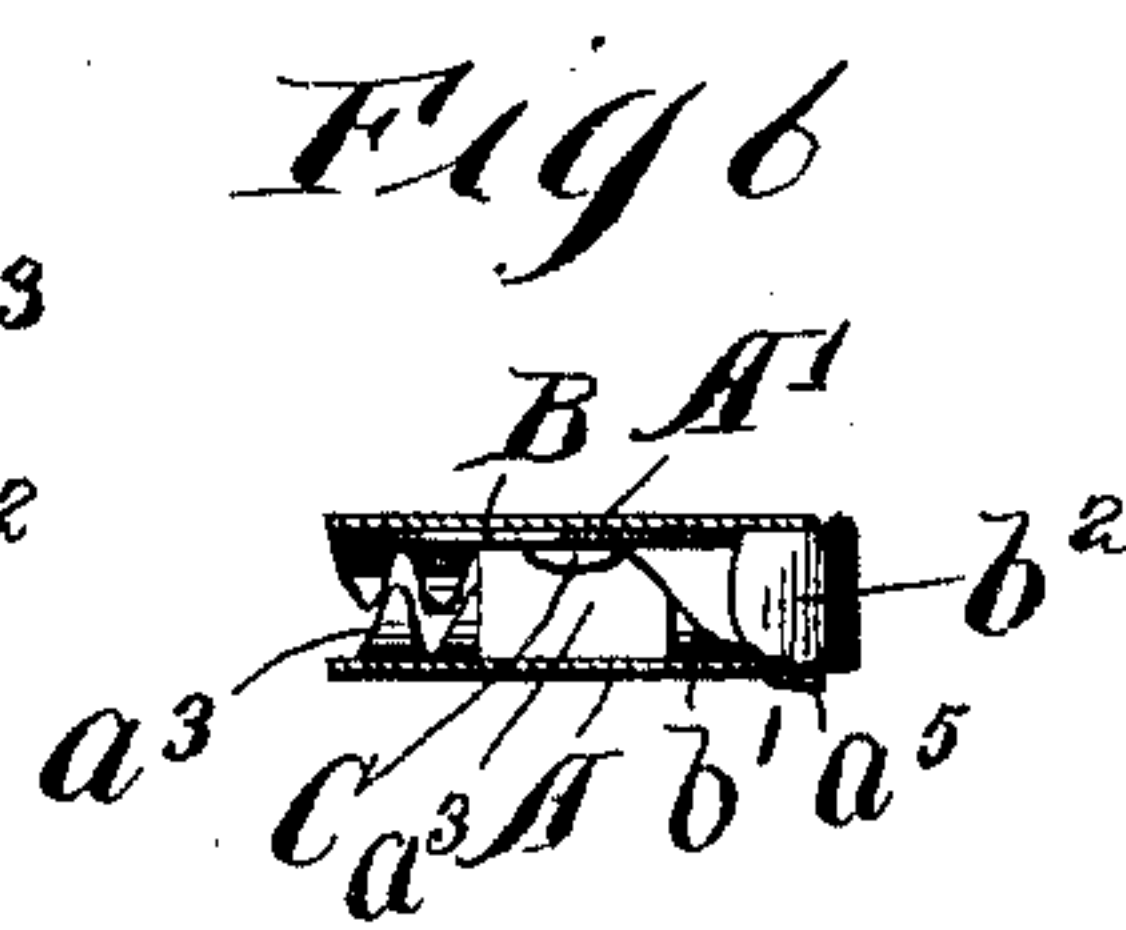
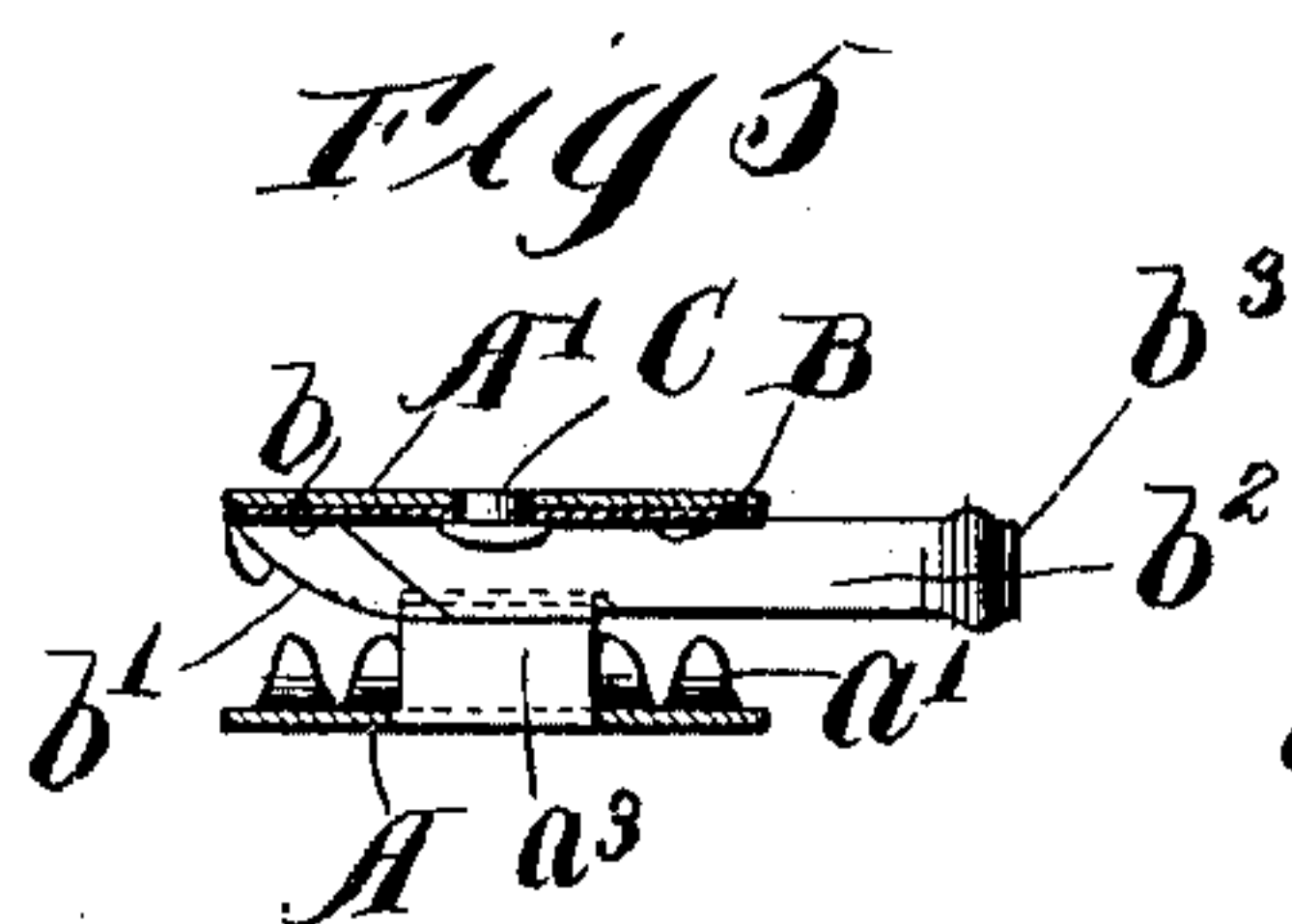
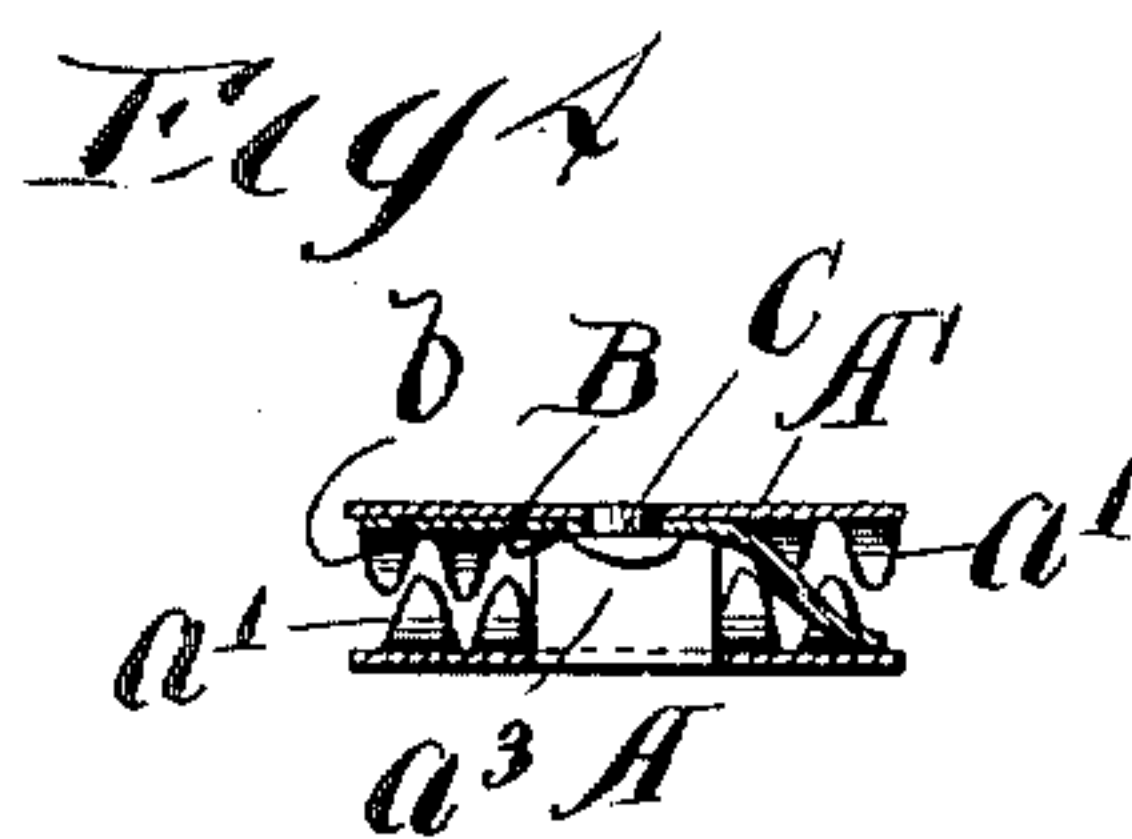
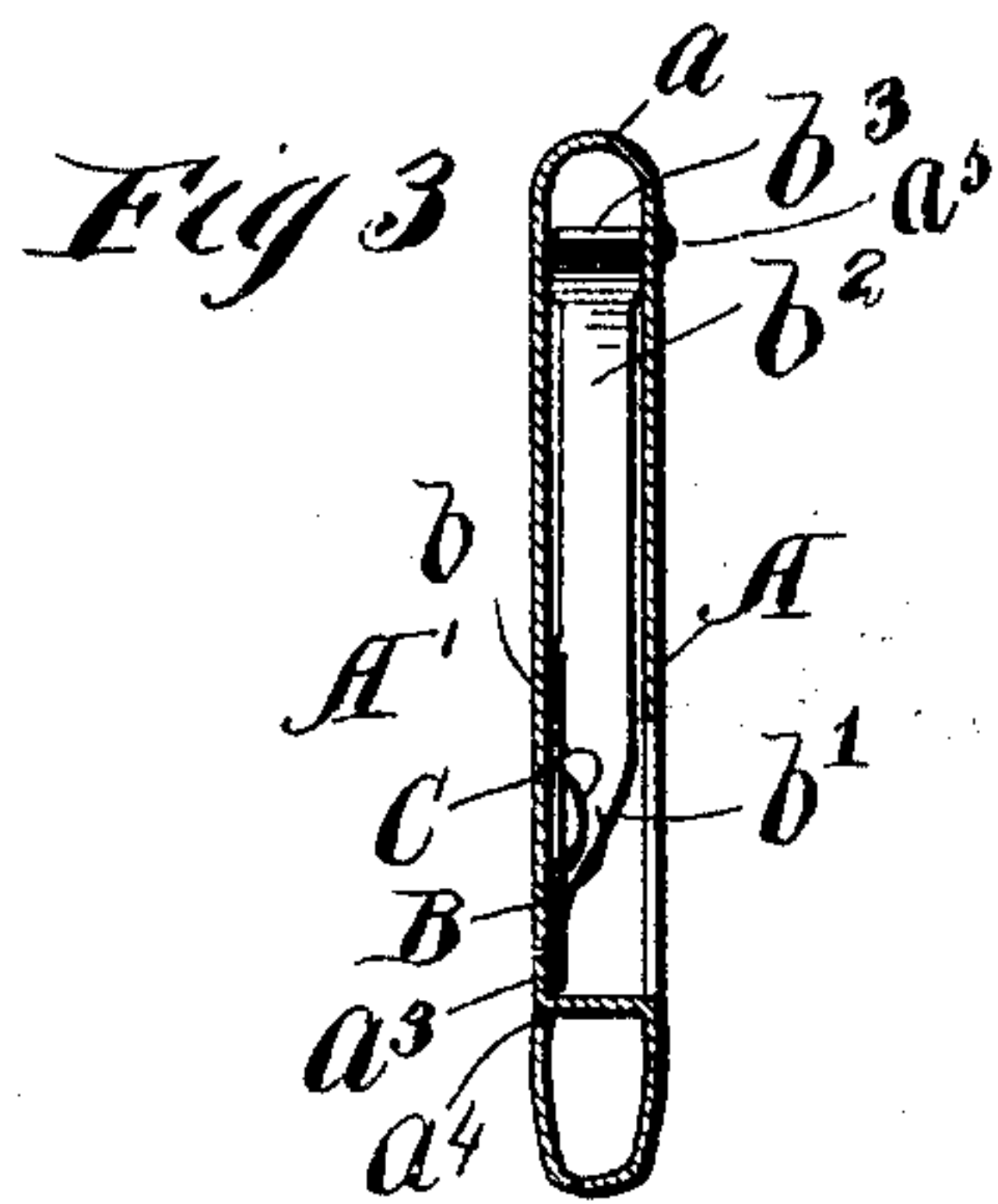
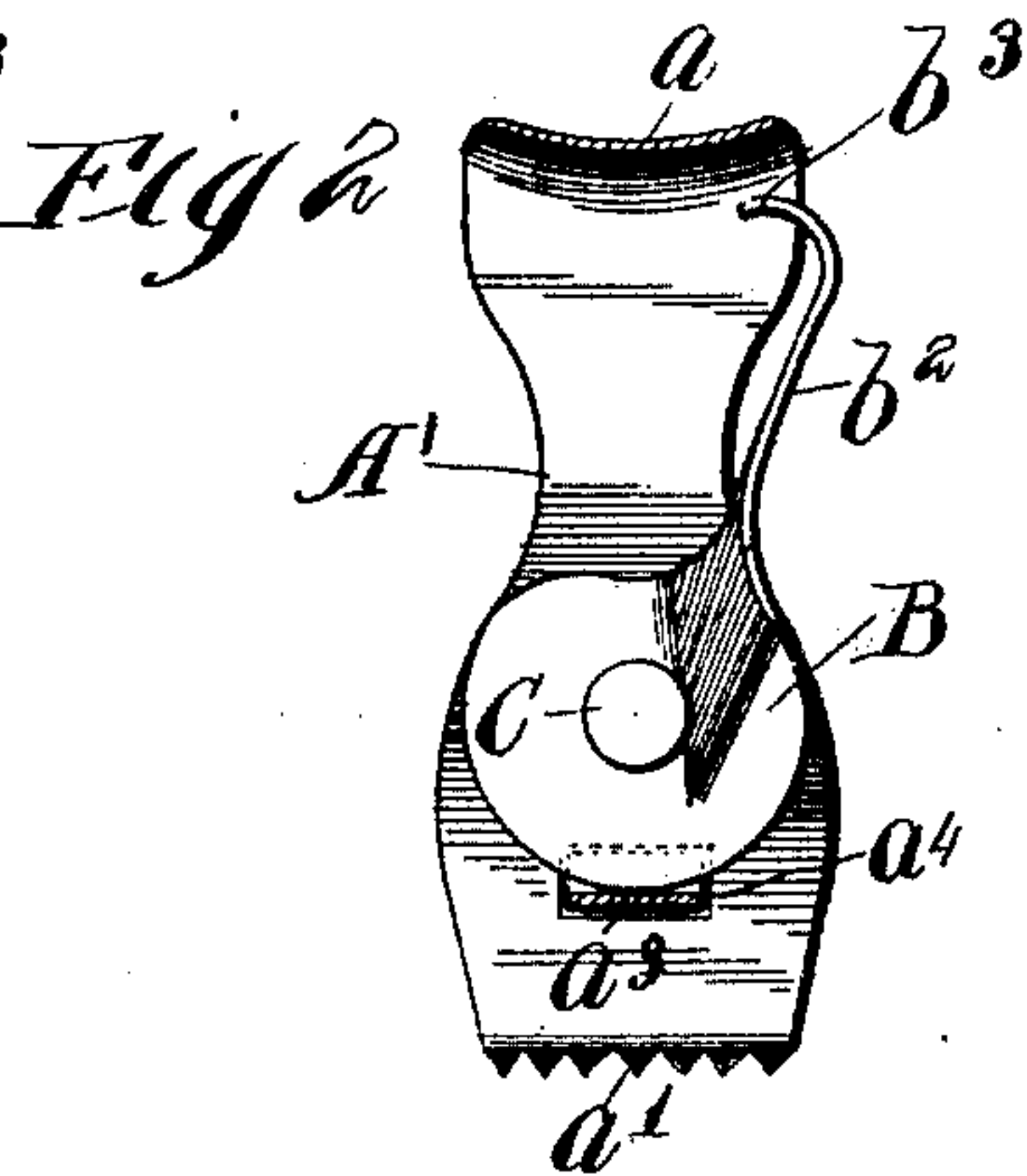
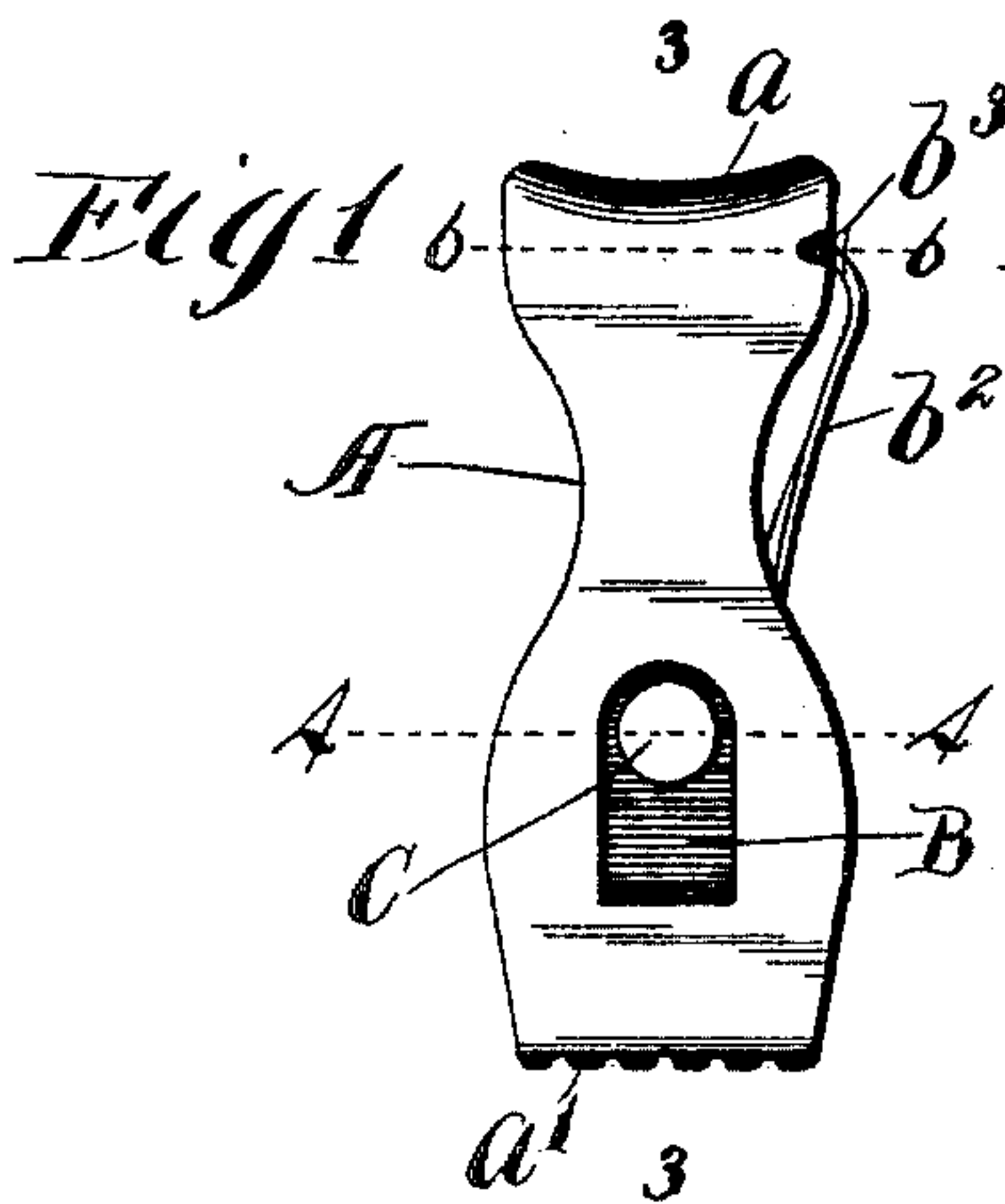
No. 679,457.

Patented July 30, 1901.

M. B. GARDNER.  
CLASP FOR GARMENT SUPPORTERS.

(Application filed July 28, 1900.)

(No Model.)



Witnesses:  
Carl H. Crawford  
R. Stuckney.

Inventor:  
Marshall B. Gardner  
by *Pool & Brown*  
his Attorneys



# UNITED STATES PATENT OFFICE.

MARSHALL B. GARDNER, OF AURORA, ILLINOIS, ASSIGNOR TO SIMON FLORSHEIM AND NORMAN S. FLORSHEIM, OF CHICAGO, ILLINOIS, (COPARTNERS UNDER NAME OF THE CHICAGO CORSET COMPANY.)

## CLASP FOR GARMENT-SUPPORTERS.

SPECIFICATION forming part of Letters Patent No. 679,457, dated July 30, 1901.

Application filed July 28, 1900. Serial No. 25,075. (No model.)

*To all whom it may concern:*

Be it known that I, MARSHALL B. GARDNER, of Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Clasps for Supporting Garments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in clasps for supporting garments of that class having parallel spring-separated jaws and a device for locking said jaws.

The invention consists in the matters hereinafter designated, and more particularly pointed out in the appended claims.

In the drawings, all of which are on enlarged scale, Figure 1 is a plan view of a device embodying the invention. Fig. 2 is a view with one side removed, showing a cam device for locking the jaws. Fig. 3 is a section on line 3 3 of Fig. 1. Fig. 4 is a view in section, taken on line 4 4 of Fig. 1, looking toward the closed jaws. Fig. 5 is a view in section on line 4 4 of Fig. 1 looking toward the jaws, showing the cam locking device swung out and the jaws separated. Fig. 6 is a view in section, taken on line 6 6 of Fig. 1, looking toward the spring connection of the jaw-arms and showing the lever of the cam closed or interlocked with the arms. Fig. 7 is a plan view showing a modified form of the device. Fig. 8 is a partial section of the modified form. Fig. 9 is a transverse section taken on line 9 9 of Fig. 7.

The invention consists, in general terms, of a clasp for supporting garments, comprising two metallic substantially parallel arms of equal length connected at one end by a spring which tends to spread their other ends apart, the free ends of said arms being bent inwardly into alinement with each other, so as to form gripping-jaws, a lever-operated cam device between the arms, said cam being pivoted to the inner face of one of the arms and engaging the other of said arms and being provided with a lever to rotate said cam, said lever having interlocking engagement at its free

end between the edges of the arms near the connecting spring and being shaped so as to curve outwardly beyond the edges of said arms between its outer end and the cam, thereby forming a finger-pull.

In reference to the drawings, A represents one of the arms, and A' the other, said arms being connected by a curved or bent portion *a*, said portion *a* comprising a spring. Preferably and as illustrated in the drawings said arms and bent portion are integral, being formed by folding a piece of sheet metal upon itself, so as to bring the outer ends together. Said outer ends *a'* are turned inwardly practically at right angles to the arms A A', so as to close together, and may be serrated, as shown in the drawings, so as to have interlocking teeth. The cam member B is a circular piece of sheet metal centrally pivoted by a pin C to the inner face of the arm A', near to the outer or free end of said arm, said circular piece B comprising a flat portion *b*, which forms a bearing-surface against the inner face of the arm A'. A shoulder is formed on said plane portion by bending a section of the edge *b'* obliquely out of line of said plane portion, as clearly shown in the drawings. Said cam edge *b'* engages an undercut lug *a<sup>3</sup>*, projecting from the inner face of the arm A. Said lug may be fashioned in any convenient way on said arm A; but a preferable method of construction is to form it of a tongue of metal integral with said arm, cut from the body thereof and bent into the required operative shape, as illustrated. The projecting lip of said lug A<sup>5</sup> is engaged by the flat portion of the cam parallel and adjacent to the arm A when the lever *b<sup>2</sup>* is thrown out to its widest position, as seen in Fig. 5. As said lever is closed upon the clamp to the position shown in Figs. 2 and 6 said lug encounters the oblique portion of the edge of the circular plate B, which forms the shoulder or cam proper, up which it slides, thereby drawing the arms A and A' together, as shown in Figs. 2 and 6. To allow said lug to move a sufficient distance to overlap the bearing-face *b* of the cam, an aperture *a<sup>4</sup>* is provided in the arm A'. The lip of said lug is equal to the arm A' in thickness, and there-



fore does not project through said aperture  $a^4$  beyond the outer surface of said arm when said cam is rotated a sufficient distance to press the jaws together. Said cam is further provided with a lever  $b^2$ , said lever being so disposed in relation to the oblique or operative portion  $b'$  on the cam edge as to be practically parallel to the edges of said arms  $A'$  and to have its outer end  $b^3$  near to the curved shank or spring  $a$ , connecting the arms, when said cam is holding the jaws  $a'$  together. When in this position, its outer end, which is turned inwardly at right angles to the main axis of said lever, Figs. 1 and 2, is forced between the margins of said arms, a shallow pocket  $a^5$  being formed close to the edge of one of said arms and a slight projection being formed on the side of the lever to enter said pocket. To facilitate the unlocking of the jaws, the lever is bent away from the arm edges between its outer end and the cam, so as to form a finger-pull, whereby the lever may be readily grasped and swung around when it is desired to unlock the device.

Obviously any convenient connection may be used to secure the clasp to the supporting-garment. One form of such a connection is illustrated in Figs. 7, 8, and 9. A hook  $D$  is formed on the outer face of one of the arms  $A'$ . Said hook comprises a shank  $d$  and a tongue  $d'$ , the latter parallel to the arm  $A'$ . Said hook may be of any desired form. The design illustrated is a convenient shape for securing the clasp on a belt. The hook may be a separate piece secured to the arm  $A$ . A preferable construction, which does not impair the smoothness of the exterior or add appreciably to the thickness of the device, consists, as shown, of cutting a tongue from the arm  $A'$  and bending it out and down, stiffening the same, if necessary, by the longitudinal fold or rib  $d^2$ .

As the clasp may be connected to a suspender, stocking-supporter, or other device by a flexible loop of cloth or cord passed through the bent portion  $a$  said part is concavely curved in a plane parallel to the plane of the arms, thereby presenting smooth edges and a good bearing-surface which conforms, in part, to the curvature of said loop. By this form of construction a clasp is obtained which is perfectly smooth on the exterior. It also has very little thickness, as the arms are

of sheet metal, and the locking device, also of sheet metal, requires but little space and is entirely concealed between the arms. Furthermore, the cam and its engaging lug are close to the edges of the jaws, which thereby hold the goods inserted between them firmly, as the position of the locking device gives rigidity to the jaw-arms. The device does not work loose, as the operative edge of the cam has passed the lug when the lever is thrown fully around and the latter bears perpendicularly against the horizontal side of the cam-disk and does not thereby tend to rotate the cam. The interlocking of the lever end between the edges of the arms, further, prevents accidental displacement. By this form of construction a clasp is made which is absolute in action, cannot become disengaged, and does not inconvenience the wearer or injure the garments by projecting points and surfaces or undue thickness.

The form shown may be modified, and I do not limit myself to any one design or form of construction, except as set forth in specific claims.

I claim as my invention—

1. A clasp for supporting garments, comprising a pair of jaws having parallel connecting-arms joined at one end by a spring integral therewith, a cam pivoted to the inner face of one of said arms, a lug projecting from the other arm for engagement with said cam, and a cam-operating lever having interlocking engagement with said arms.

2. A clasp for supporting garments, comprising a pair of jaws having parallel connecting-arms joined at the end by a spring integral therewith, a cam pivoted to the inner face of one of said arms, a lug projecting from the other arm for engagement with said cam, and a cam-operating lever having interlocking engagement between the side margins of said arms, said lever being curved between its outer end and the cam to project beyond the side margins of said arms when interlocked.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 21st day of July, A. D. 1900.

MARSHALL B. GARDNER.

Witnesses:

W. F. FORBES,  
PETER KLEES.