

G. A. HOLMES.  
SNAP FASTENER.

APPLICATION FILED MAY 15, 1908.

911,042.

Patented Feb. 2, 1909.

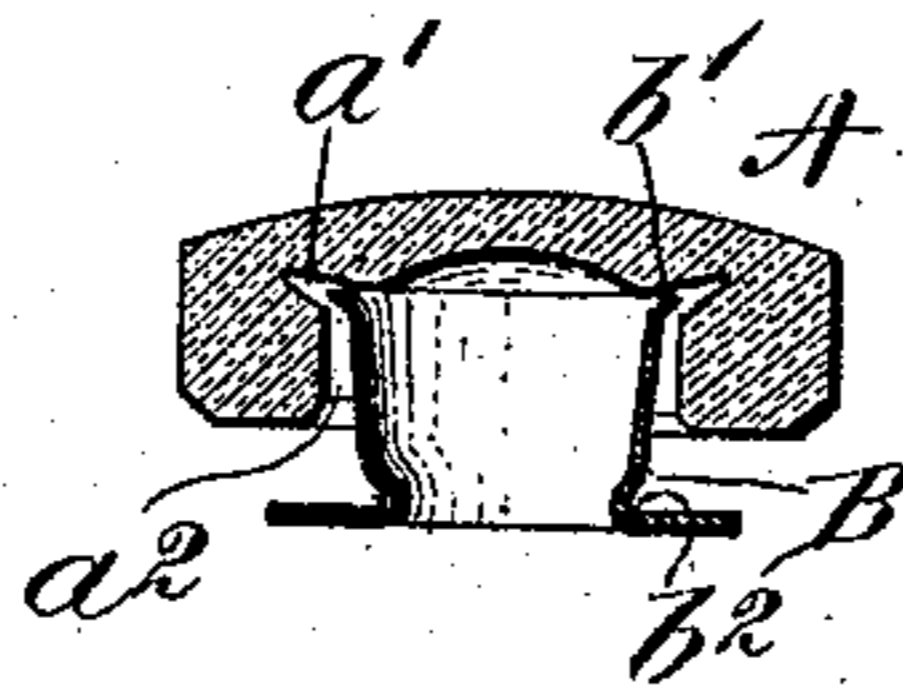


Fig. 1.

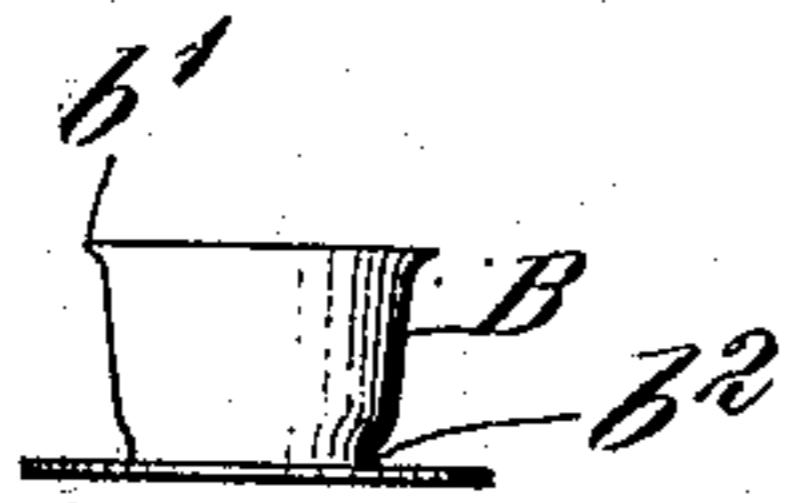


Fig. 2.

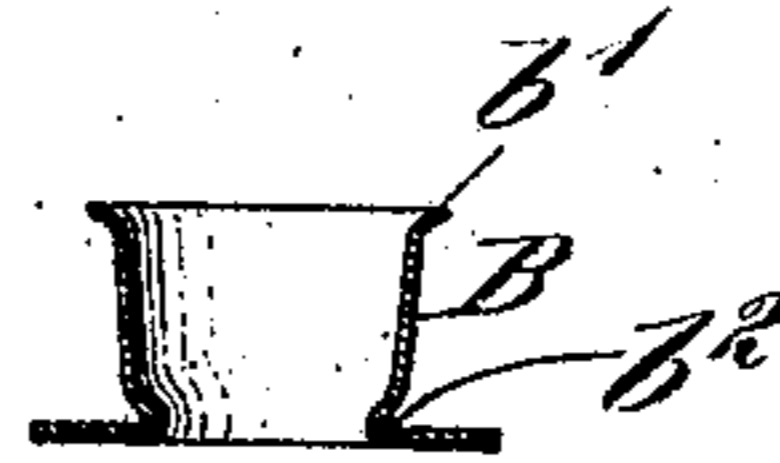


Fig. 3.

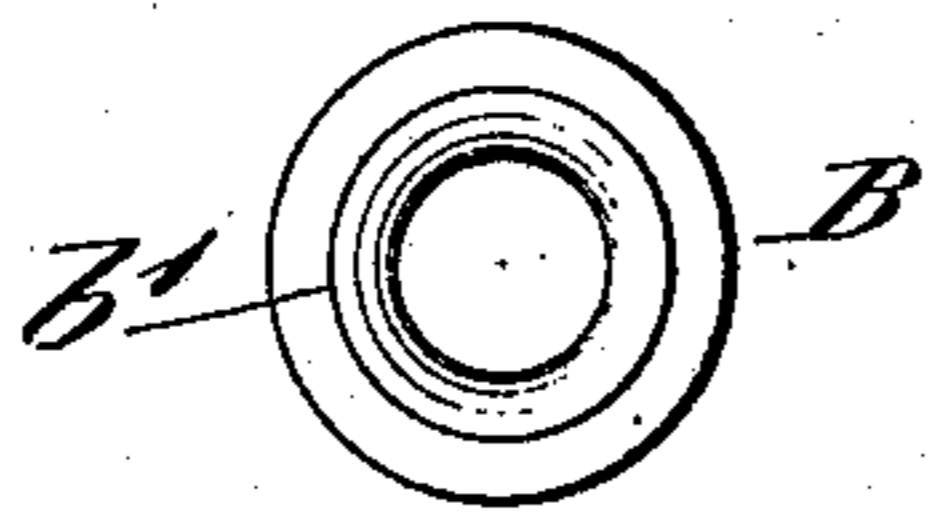


Fig. 4.

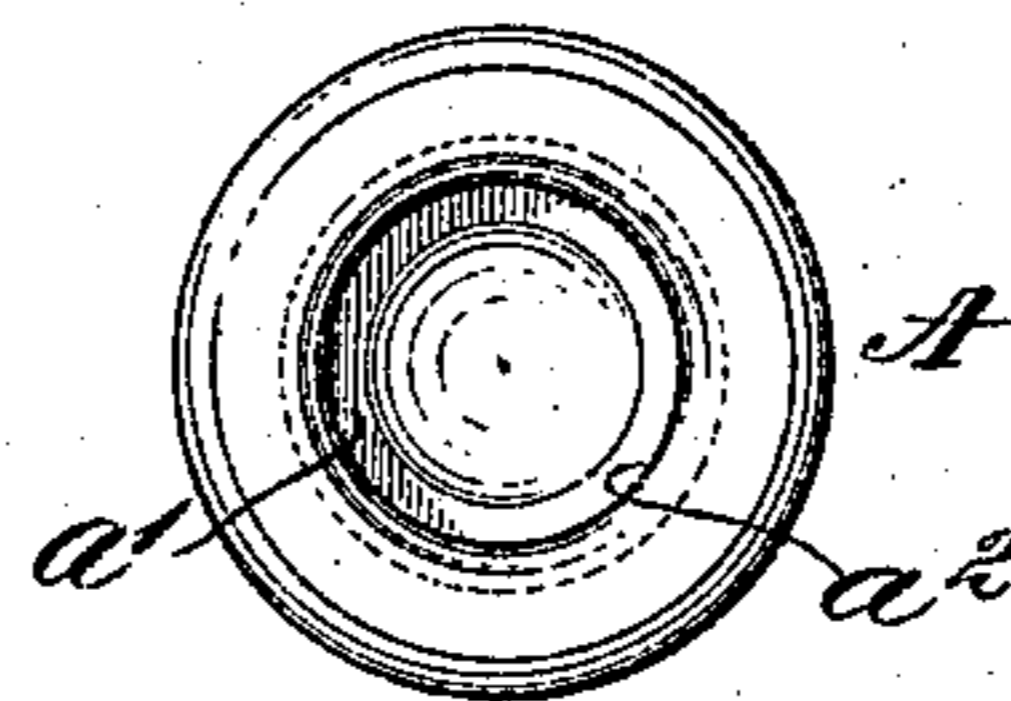


Fig. 5.

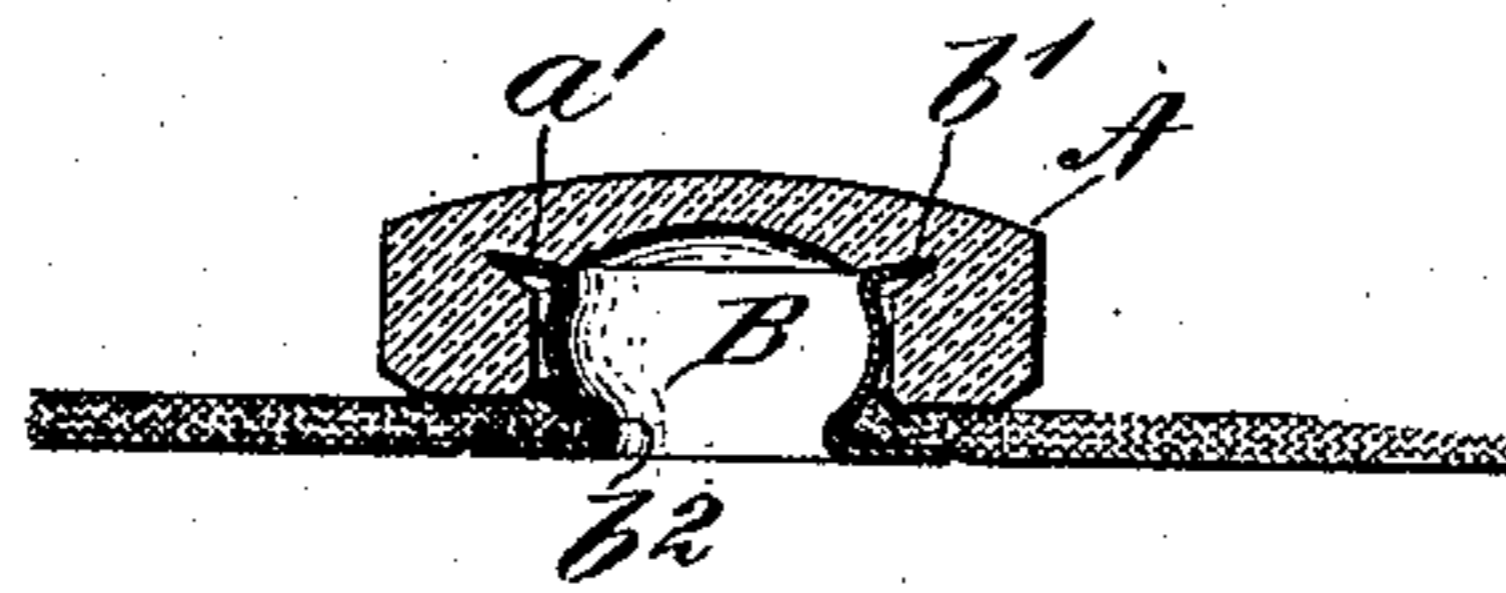


Fig. 6.

WITNESSES:

Charles D. Wooten

Josephine H. Ryan

INVENTOR:

George A. Holmes,

By Roberts, Roberts & Gishman  
attorneys

# UNITED STATES PATENT OFFICE.

GEORGE A. HOLMES, OF NEWTON CENTER, MASSACHUSETTS, ASSIGNOR TO UNITED STATES FASTENER COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE.

## SNAP-FASTENER.

No. 911,042.

Specification of Letters Patent.

Patented Feb. 2, 1909.

Application filed May 15, 1908. Serial No. 433,013.

*To all whom it may concern:*

Be it known that I, GEORGE A. HOLMES, a citizen of the United States, and resident of Newton Center, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Snap-Fasteners, of which the following is a specification.

My invention relates to snap fasteners and more particularly to that class of snap fasteners in which certain parts are made of non-metallic material.

The cap piece of fasteners of this class ordinarily comprises a chambered cap made wholly of some non-metallic substance such as pearl, celluloid, bone or horn and having an opening on its under side into which a metal eyelet is inserted and then upset against the top of the chamber within the cap. In assembling the parts of these fasteners considerable difficulty and expense has been experienced because of the fact that when pressure necessary permanently to secure the parts is applied, the eyelet does not readily upset against the top of the cap chamber as is the case when a metal cap is employed, but on the contrary, sinks into the comparatively soft material of which the cap is composed and often passes completely through and destroys it. To overcome this difficulty it is the usual practice to insert a metal turning piece or anvil in the cap chamber against which the eyelet is upset. The use of this anvil is objectionable, not only because of the expense incident to its manufacture and use, but also because it is visible through a cap of transparent material, such as celluloid, and mars the beauty of the cap.

It is the object of this invention to obviate the difficulty experienced in upsetting a metal eyelet within a cap of comparatively soft material, without the addition of a turning piece or other multiplication of parts.

Referring to the drawings,—Figure 1 is a sectional elevation of my improved non-metallic chambered cap and eyelet; Fig. 2 is a view in elevation, and Fig. 3 is a view in section of my improved eyelet; Figs. 4 and

5 are plan views of my improved eyelet and cap respectively; and Fig. 6 is a sectional elevation of my improved fastener affixed to material.

A is a cap made of non-metallic material such as pearl, celluloid, bone or horn, and provided with an annular groove  $a'$  and an eyelet-receiving opening  $a^2$ .

B is an eyelet having substantially straight walls, an outwardly turned tip  $b'$  and an annular inset  $b^2$  at or near the juncture of the base and barrel.

In assembling the parts of my improved fastener member, the eyelet barrel is first passed through the material and then inserted in the opening  $a^2$ , the tip  $b'$  of the eyelet barrel resting within the annular groove  $a'$  against the upper surface thereof and tangent thereto, as shown in Fig. 1. When subjected to the pressure necessary permanently to secure the parts, the eyelet barrel is readily upset and does not tend to press upward into the comparatively soft material of the cap, but because of the initial inclination of its outwardly turned tip, expands outwardly into the groove  $a'$ , the parts assuming the position shown in Fig. 6.

By this construction simple and effective means are provided whereby without increasing the number of parts, the annoyance and great expense caused by the destruction of the cap by the eyelet are eliminated.

What I claim and desire to secure by Letters Patent is:

1. A method of making the socket member of a snap fastening pair, said member comprising a cap of non-metallic material provided with an opening and a flanged metal eyelet having a substantially straight barrel, consisting in flaring the tip of the eyelet barrel before the eyelet and cap are assembled, and thereafter inserting said flaring tipped barrel in said opening in said cap and thereafter upsetting said eyelet against the top of said cap.

2. A method of making the socket member of a snap fastening pair, said member comprising a cap of non-metallic material provided with an annular groove and an eyelet receiving opening, and a flanged eyelet hav-

95

100

2  
ing a substantially straight barrel, consisting  
in flaring the tip of the eyelet barrel before  
the eyelet and cap are assembled, and there-  
after inserting said flaring tipped barrel in  
5 said opening in said cap, and thereafter ex-  
panding said flaring tip in said annular  
groove.

Signed by me at Boston, Massachusetts,  
this 11th day of May, 1908.

GEORGE A. HOLMES.

Witnesses:

CHARLES D. WOODEBERRY,  
JOSEPHINE H. RYAN.