No. 665,938. Patented Jan. 15, 1901.

F. SCHÖNBACH.

BALL AND SOCKET FASTENER.

(Application filed July 13, 1900.)

(No Model.)

Fig. 1.

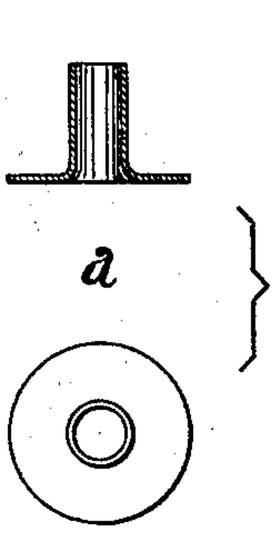


Fig. 2.

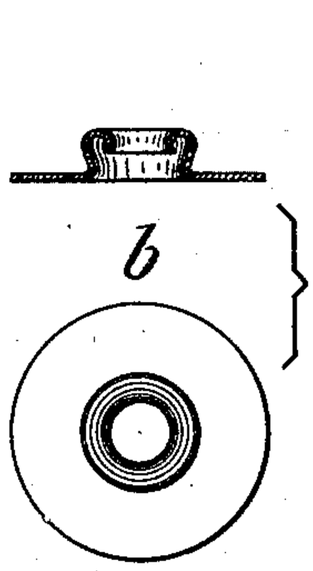


Fig. 3.

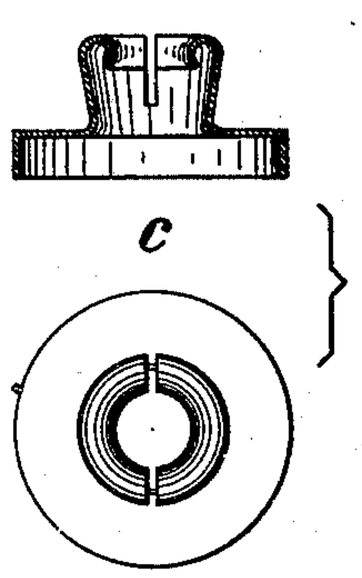


Fig. 4.

Fig. 5.

Fig. 6.

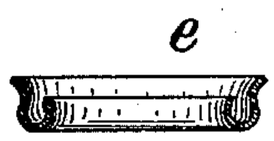


Fig. 7.

Fig. 8.

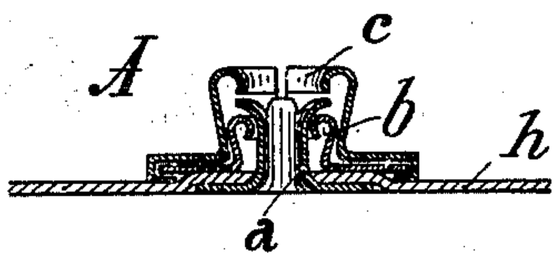


Fig. 9.

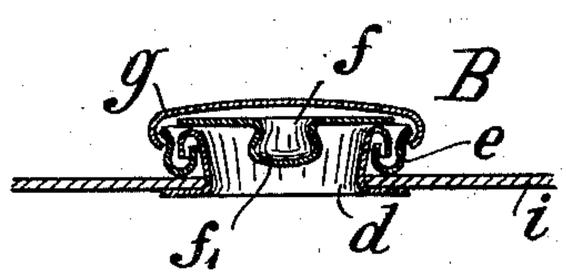


Fig. 10.

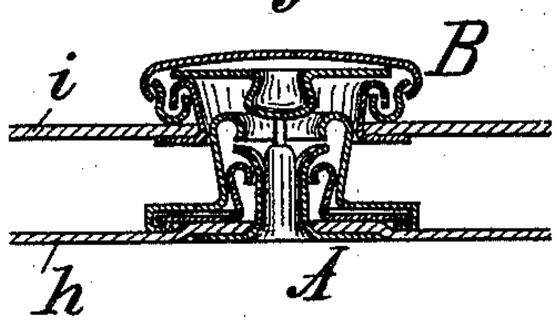
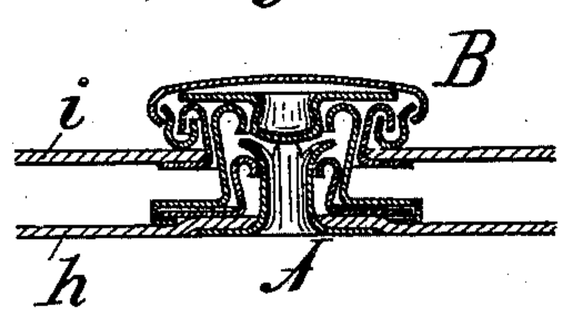


Fig. 11.



Witnesses.
Ella L. Giles
Otto Munn

Inventor.
Franz Schönbach
BY Richards & R
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANZ SCHÖNBACH, OF BERLIN, GERMANY.

BALL-AND-SOCKET FASTENER.

SPECIFICATION forming part of Letters Patent No. 665,938, dated January 15, 1901.

Application filed July 13, 1900. Serial No. 23,488. (No model.)

To all whom it may concern:

Be it known that I, FRANZ SCHÖNBACH, a subject of the Emperor of Austria-Hungary, and a resident of Berlin, Germany, have invented certain new and useful Improvements in Ball-and-Socket Fasteners, of which the following is a specification.

The ordinary pressure-buttons hitherto used do not meet all requirements, as the fastener will often become loose, so that the button is unfastened. This disadvantage is especially felt in case buttons are employed for the fastening of gloves, and it often occurs that the button opens by itself when it is fastened too near the ball of the thumb. This is especially the case when by moving the wrist a greater pressure is exercised on the button from below. This improvement is destined to remove this disadvantage by applying an additional fastening device, which is formed by a projection placed in the upper casing of the pressure-button. After the casing has been pressed over the button proper and the first part of the fastening has been performed this projection will engage with the button after an additional pressure, whereby the latter will be somewhat widened. Thus the elastic cap will be pressed tightly against the interior wall of the casing, whereby an involuntary opening of the fastener will be rendered impossible.

In the annexed drawings the new button is shown on an enlarged scale.

Figures 1 to 3 illustrate in section and plan the different parts of the button proper. Figs. 4 to 7 show the different parts of the fastening-case. Fig. 8 is a section through the finished button. Fig. 9 is a section through the fastening-case. Fig. 10 illustrates the first fastening position of the button. Fig. 11 shows the button after having been fastened twice.

As may be seen from the drawings, the button proper, A, consists of the parts *a b c*, Figs. 1 to 3, which are united by suitable edging, the parts *a* and *b* engaging the flap *h* to be closed, as shown in Fig. 8. The fastening-case B consists of the parts *d e f g*, which are also united by a proper edging of the different parts and engage the other part of the fastening-strip *i*, Fig. 9. The cap *c* of the button A is rendered elastic by suitable incisions, so that the parts are pressed together to a slight extent as soon as the casing B is pressed upon A. Thereafter they will spread again and press tightly against the inner wall of the casing B, so that the first fastening position will be attained. In the casing B a small projection *f'* is fixed, which after additional pressure upon the casing B is introduced into the hollow part *c* of the button A, thus effecting the second fastening, Fig. 11. The elastic parts of the button part *c* are at the same time pressed apart and forced against the inner surface of the casing, whereby the fastening is rendered absolutely safe.

In opening the fastener by pulling at the one part of the material the projection *f'* is first removed from the button part *c*, whereupon after further pulling the casing B is released from the button A.

I claim—

1. In combination in a two-part spring-clasp, a lower engaging part, and an upper projection having a double engagement with the single lower projection, substantially as described.

2. In combination in a spring-fastener, or button, a lower part including a spring-stud, and an upper part having a detachable engagement with the interior and with the exterior of said stud, substantially as described.

3. In combination in a spring-fastener, or button, a lower member including a hollow spring-stud, and an upper member including a cap engaging the exterior of said stud, and an axial projection engaging the interior of the same.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FRANZ SCHÖNBACH.

Witnesses:
WOLDEMAR HAUPT,
OTTO HOESEN.