(No Model.)

C. LA DOW.

FASTENING DEVICE.

No. 451,420. Patented Apr. 28, 1891.

Fig. 1.

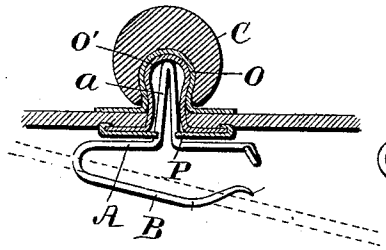


Fig. 2.

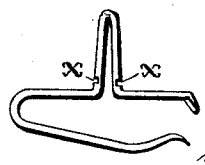


Fig. 3.

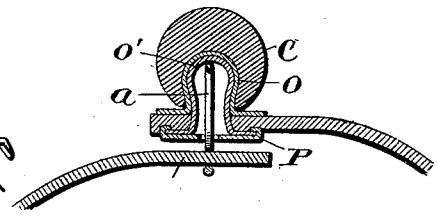


Fig. 4.

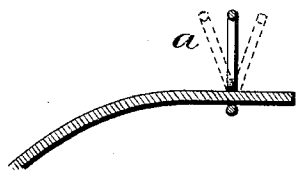


Fig. 5.

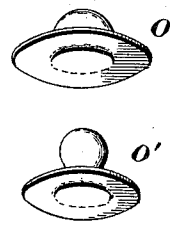


Fig. 6.

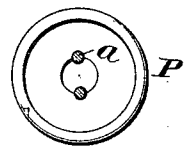
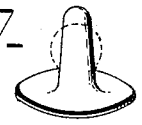


Fig. 7.



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UNITED STATES PATENT OFFICE.

CHARLES LA DOW, OF ALBANY, NEW YORK.

FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 451,420, dated April 28, 1891.

Original application filed December 26, 1890, Serial No. 375,830. Divided and this application filed March 19, 1891. Serial No. 385,569. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LA DOW, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Clasps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to clasps of a type suitable for adjustably fastening the opposing flaps of shoes or gloves together.

In the drawings, Figure 1 represents a section of a separable head attached to one flap of the shoe, and by full lines the spring-stud *a* and its base or interlocking arms A B ready to be locked to another flap, (shown in dotted lines,) the arms of the stud *a* and also the base-arm A B, being adapted to be attached in a direction parallel with the length of the foot or wrist. Fig. 2 represents a side view of the stud with arms unlocked. Fig. 3 represents an end view of the stud locked in position on the shoe-flap, and also represents a sectional view of the separable head attached to the opposite shoe-flap. Fig. 4 represents the rocking movement of the stud relatively to the fabric on which it is mounted. Fig. 5 represents the metal shell *o*, which forms the foundation on which the separable head is formed, and also shows the inner shell *o'*, which secures *o'* to the fabric when *o* and *o'* are locked together with the fabric between them. Fig. 6 represents the circular plate P, which is secured to the base of *o'*, and also shows an end view of the arms of the stud *a*, which engage with base-plate P of the separable head. Fig. 7 represents the blank cone *o'* before it is made to have a spherical head by being crushed or flattened somewhat by the shell *o* being pressed down onto said cone, which then takes the form shown in dotted lines in Fig. 7.

In my invention the separable head consists, primarily, of the shell *o* and the inner cone *o'* thrust through the fabric, the outer shell being then pressed down upon *o'*, by which operation a spherical head is formed on the upper end of the cone *o'*, which prevents said cone from withdrawing from the outer shell, and this operation also firmly clasps the fabric between the base-portions of *o* and *o'*.

The outer shell is preferably coated with papier-maché or other composition, (represented by C;) but this coating may be omitted, if desired, in which the shell *o* will form the outer shell of the separable head.

A plate having a circular hole is firmly attached to the base of *o'*, and the thickness of this plate P should be a little less than the vertical height of the notches X X in the stud, so that the plate will freely enter said notches when the separable head is pushed down on the stud.

It will be observed that the stud is made tapering, and as the head is squeezed down upon it the plate enters the notches in the stud and secures the head thereon. To unlock the parts sufficient resistance is applied to the separable head in an outward direction from the stud to cause the arms of the stud to spring toward each other sufficiently to permit the head to disengage itself from the notches. The stud can be readily attached to any fabric or leather by passing the arm B through the fabric and then interlocking it with the arm A.

The arms A B can be as readily unlocked and the location of the stud varied, as may be desired.

It will be understood that the stud can rock freely relatively to the fabric on which it is mounted, and this rocking movement facilitates its engagement with the head. Said rocking movement also performs the very desirable function of a lever in drawing the flaps together as the head is being forced downward on the stud, giving greater tension to the parts and enabling the two flaps to be buttoned more tightly than would be possible if the stud did not rock.

It will be observed that the circular opening in the base of the stud *o'* adapts it to interlock with the two arms of the stud at any side of said opening, so that the separable head and its base may be fastened to shoe-flap or glove without reference to any special torsional position, and it will also be seen that the arms of the stud enter the widest part of the opening in said circular base, and when

strain is applied to the flaps in opposite directions the edges of said circular opening draw back on the arms or enter the notches X X toward a narrow part of said circular opening and thereby hold the parts more securely than if the opening in the base was the same shape as the stud.

This case is a division of my application, Serial No. 375,830, filed December 26, 1890, and I disclaim herein the subject-matter claimed in the original application.

Having described my invention, I claim—

1. The herein-described fastening device, consisting of a socket member having an opening in its under side and adapted to be secured to a garment or article, and a detachable stud member consisting of a safety-pin, the upper part of which is bent upon itself to form a V-shaped spring stud or loop and provided with means for engagement with the socket member, substantially as described.

2. The herein-described fastening device, consisting of a socket member having an opening in its under side and adapted to be secured to a garment or article, and a detachable stud member consisting of a safety-pin, the upper part of which is bent upon itself to form a V-shaped spring stud or loop and provided with means for engagement with the socket member, said stud being notched at or near its base for attachment to the socket member, substantially as described.

3. The herein-described fastening device, consisting of a socket member having an opening in its under side and a detachable stud member consisting of a safety-pin, the upper bar of which is bent upon itself to form a V-shaped spring stud or loop, the stud being notched for engagement with the socket member and the attaching-pin provided with a deflected end, and said safety-pin adapted to be secured lengthwise the flap or opening to be connected, whereby said stud member may be rocked to permit easy clasping of the two parts, substantially as described.

In testimony that I claim the invention above set forth I have affixed my signature in presence of two witnesses.

CHARLES LA DOW.

Witnesses:

A. B. GORDON,

S. A. TERRY.