F. ČUPR.

LOCKING DEVICE FOR PRESSURE BUTTONS.

APPLICATION FILED FEB. 12, 1916.

1,201,154. Patented Oct. 10, 1916.

FIG. 1.

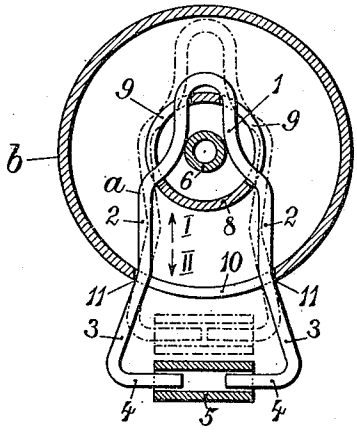
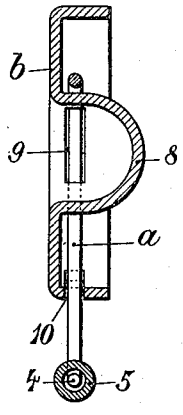


FIG. 2.



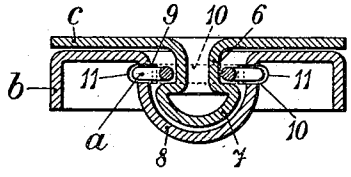


FIG. 3.

FIG. 4.

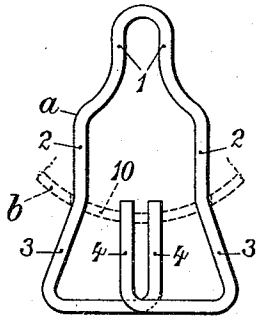
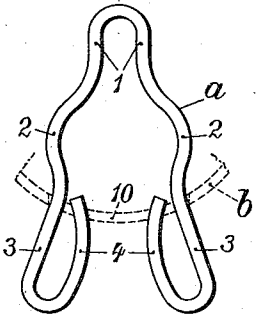


FIG. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANTIŠEK ČUPR, OF CHRAST, NEAR CHRUDIM, AUSTRIA-HUNGARY.

LOCKING DEVICE FOR PRESSURE-BUTTONS.

1,201,154. Specification of Letters Patent. Patented Oct. 10, 1916.

Application filed February 12, 1916. Serial No. 77,993.

To all whom it may concern:

Be it known that I, FRANTIŠEK ČUPR, a subject of the Austro-Hungarian Emperor, and resident of Chrast, near Chrudim, Bohemia, Austria-Hungary, have invented certain new and useful Improvements in Locking Devices for Pressure-Buttons, of which the following is a specification.

The present invention has for its object a locking means for pressure buttons intended to prevent any spontaneous, undesired unlocking of the pressure button, whereby the buttoning is readily performed, the unbuttoning being produced without any effort and without running the risk of tearing even the most tensious fabric.

The invention is illustrated in the accompanying drawing, in which:

Figure 1 is a partially sectional front view of a pressure button provided with the novel locking device. Fig. 2 is a vertical section through the center of the button shown in Fig. 1. Fig. 3 is a horizontal section through the center of same; Figs. 4 and 5 are constructive forms of the locking means.

The invention consists in a button locking spring or wire *a* in shape of a stirrup whose both prongs or arms work like lever arms and project somewhat beyond the button *b*. The head portions 1, 1 of the arms 1, 2, 3 are apart from each other the required distance for closely bearing against the neck 6 of the button head and project into the button cap 8 through apertures or slots 9 provided on the latter. The intermediate portions 2, 2 of the arms of spring *a* are more distant from each other than the portions 1, 1, in order not to interfere with the button head 7 when the latter is pressed into the cap or removed from the latter. The free portions 3, 3 of the spring *a*, projecting beyond the button *b*, diverge from each other and bear against the edges 11 of a slot 10 provided at the border of the flange of button *b*.

The locking spring *a* may be shifted in the direction of the arrows I and II (Fig. 1) and, owing to the diverging portions 3, 3 of the spring *a*, the latter strives to take up the position shown in full lines in Fig. 1, in which position the button is locked. If the stirrup *a* is pushed by hand in the direction of the arrow I, that is to say, toward the button-center, and takes up the position shown in dotted lines in Fig. 1, the head portions 1, 1 of the stirrup get out of the cap 8 and the button head 7 becomes free, whereby both portions *b* and *c* of the pressure button may be removed from each other (Fig. 3). As soon as the hand releases the spring *a*, the latter, owing to the resiliency of the diverging arm portions 3, 3, automatically takes up again its usual position (full lines in Fig. 1). The locking together of both button parts *b* and *c* is produced by simply pressing the button head 7 into the cap 8, without the necessity of operating the spring by hand.

In order to readily push the spring *a* toward and into the button, the free ends 4 are bent toward each other and engaged in a sleeve 5 (Fig. 1).

Fig. 4 shows a constructive form of the locking spring *a* in which the free end portions 4 are bent upwardly in such a manner that they become partly superposed to each other, the ends projecting slightly into the button portion *b* through slot 10.

The medium portions 2, 2 of the branches or arms forming the locking spring *a* may also be arc shaped as shown in Fig. 5.

Having now fully described my said invention, what I claim and desire to secure by Letters Patent, is:

1. In a button, the combination of a female member provided with an outer flange and a central well, the walls of the well having oppositely disposed slots, a male member having a head and a reduced neck, said head engaging in the well, a horizontally slidable interlocking element comprising a wire centrally bent to form a pair of resilient legs which slide in and are confined by the slots in the wall of the well, the legs at the inner end of the element being spaced to engage the opposite sides of the neck of the head, the legs being bent outwardly from the neck engaging portions to form a space for the withdrawal of the head from the well when the element is forced away from engagement with said neck, the sliding movement of the interlocking element being limited by the flange on the female member and the wall of the well.

2. In a button, the combination of a female member provided with an annular flange formed with a horizontal slot, said member having a central well the wall of the well having oppositely disposed slots, an interlocking element formed of resilient wire and bent to provide two resilient legs

which pass through the horizontal slot in the flange of the female member, the free outer ends of the legs being bent inwardly toward each other, the portions of the legs adjacent the bent end being parallel and spaced to be confined within the well when said element is drawn outwardly in interlocked position, said parallel part of the legs forming a neck engaging portion, the legs being bent outwardly to form a space substantially equal to the width of the inner portion of the well, a sleeve in which the free outer ends of the legs engage, a male member having a central lug formed with a flanged head and an intermediate neck, the lug engaging in the well and the neck engaging portion of the interlocking element engaging the neck and the flanged head to lock the two members together, the movement of the interlocking member being limited by the flange on the female member and the well.

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

FRANTIŠEK ČUPR.

Witnesses:

MILOSLAV HRUBY,

FAROMIR GRÜNWALN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."