(No Model.)

H. WEXEL.

SLEEVE BUTTON.

No. 536,407. Patented Mar. 26, 1895.

Fig. 1.

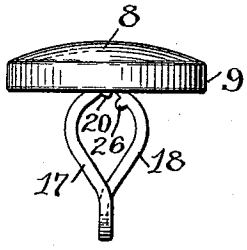


Fig. 2.

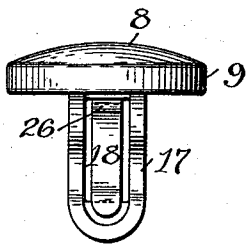


Fig. 3.

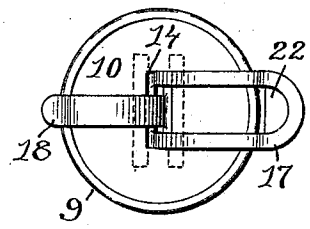


Fig. 4.

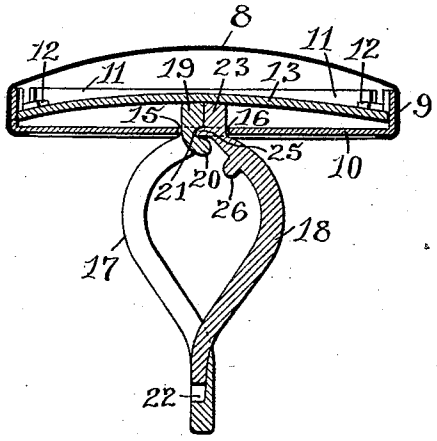


Fig. 6.

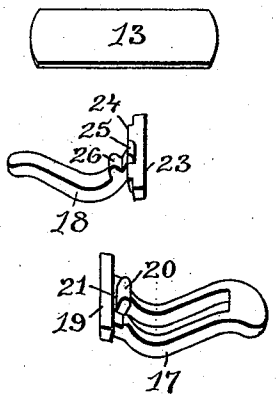
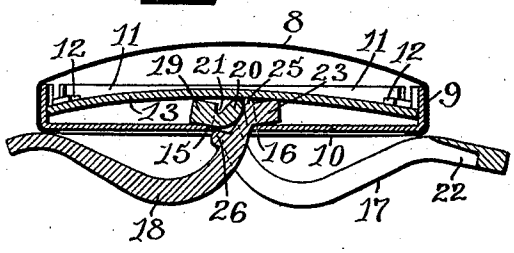


Fig. 5.



WITNESSES:

Henry J. Miller

Chas. H. Luther Jr

INVENTOR:

Henry Wexel,

by Joseph A. Miller & Co.,

Attys.

UNITED STATES PATENT OFFICE.

HENRY WEXEL, OF ATTLEBOROUGH, MASSACHUSETTS.

SLEEVE-BUTTON.

SPECIFICATION forming part of Letters Patent No. 536,407, dated March 26, 1895.

Application filed December 6, 1894. Serial No. 531,005. (No model.)

To all whom it may concern:

Be it known that I, HENRY WEXEL, of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Sleeve-Buttons; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in that class of sleeve-buttons in which hinged-shoes or levers are provided for securing the ends of a cuff or wrist-band.

The objects of the invention are to simplify the construction and to facilitate the operation of the shoes or levers.

Still another object of the invention is to so construct a button of this class that the movement of one lever will cause the simultaneous operation of the other lever by a novel flexible connection between the two.

The invention consists in the peculiar construction of the various parts of the button and their novel combination with each other.

Figure 1 represents a side elevation of the improved button with the levers in the unlocked position ready for insertion into the button-holes of a cuff or similar article. Fig. 2 represents a similar view taken at right angles to Fig. 1. Fig. 3 represents a bottom view of the improved button, the levers being shown in the locked position. Fig. 4 represents an enlarged vertical section of the button with the levers in the unlocked position, Fig. 5 being a similar view showing the levers as locked. Fig. 6 represents detail views of the levers, the spring, and the cap in which the levers and spring are secured before insertion into the button-head.

Similar numbers of reference designate corresponding parts throughout.

In carrying my invention into effect I form a button-head 8 which may be ornamented in any usual manner and having a rim 9 following the outline of the head. The operative mechanism of the button is secured to a cap having a bottom 10 and a flange or turned-up wall 11 portions of which are partially separated from the main flange 11 to form fingers 12—12 and are bent inward to secure the ends of the spring 13. The bottom-plate 10 is furnished with an opening 14 extending at right angles to the spring 13 and having parallel bearing-edges 15 and 16 for the upper ends of the levers.

In this button two levers 17 and 18 are used. The lever 17 is of elongated U-shape the ends of its arms being connected by a square shaft 19 the ends of which extend beyond the sides of the lever. Depending from the central portion of this shaft 19, between the arms of the lever, is a cam 20 lobe-shaped in vertical section and above this is a recess 21 formed by the upper surface of the cam 20 and by the under surface of the shaft 19. The U-shaped lever 17 is bent outward at its upper part and then inward to form part of a wedge of which the free end serves as an entering edge, being furnished with a recess 22 to receive the end of the lever 18. The lever 18 is constructed with a single arm to swing between the double arms of the lever 17, being curved to form the portion of the wedge corresponding with the lever 17 when they are in the open position. This lever 18 has a square shaft 23 extending transversely at its upper end. On the lower portion of the shaft is the shoulder or bearing-portion 24 which prevents the lateral movement of the lever 18 when it is secured in position. Extending from the lower portion of the shaft 23 on its inner side is the drawing-tooth 25 having a curved upper surface and a flat lower surface to fit the recess 21 of the lever 17. On the inner surface of the lever 18 below the tooth 25 is the stud 26 against which the cam 20 may act when the lever 17 is being moved from the unlocked position.

In assembling the parts of the button the levers 17 and 18 are inserted through the opening 14 in the bottom 10 of the cap-piece. The shafts 19 and 23, being longer than the opening, prevent the passage of the same. The levers now being in the position shown in Fig. 4, with the inner surfaces of their shafts in contact, the tooth 25 of the shaft 23 engaging in the recess 21 of the shaft 19, while the bearing portion 24 of the shaft 23 extends into the opening 14 and prevents the lateral movement of this shaft,—the lever 17 does not require such a bearing-piece as the lever itself is nearly as wide as the length of the opening 14. The spring 13 is now placed across the shafts of the levers and its

ends are secured by means of the fingers 12—12. The cap to which the levers are thus secured is now inserted in the button-head 8 and a portion of the rim 9 is bent over the bottom 10 to fasten the two together.

When the levers are to be operated to place them in the locked position the free end of the lever 17 is naturally taken hold of, as it is the more prominent, and, being pushed down against the under surface of the button, causes the simultaneous movement of the lever 18 by the cam 20 bearing against the under surface of the tooth 25. In this movement the square edges of the shafts serve to lift the spring 13, which, as soon as these square edges move past their axial centers, having a tendency to regain its original position, bears down on the shafts and assists their movements to bring them in the position shown in Fig. 5 with the levers in the locked position.

In bringing the levers from the locked to the unlocked position either of the levers may be operated. If the lever 17 be moved away from the button the cam 21 will bear on the stud 26 of the lever 18 and exert a leverage thereon to throw the lever 18. Should the lever 18 be the one actuated by hand the tooth 25 bearing on the cam 21 will exert a downward pressure thereon which will cause the lever 17 to be operated, the spring 13 acting as in the locking movement and the edges 15 and 16 of the opening 14 in the cap serving as fulcrum on which the levers turn and also preventing their separation.

It will be seen that no nicely fitted parts are necessary in the construction of this button, and that the parts may be much stronger and more durable than as buttons of this class have been heretofore constructed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination with a button-head, a cap having the slotted bottom 10 and flange 11, and a spring secured therein, of the lever 17 having a U-shaped arm extending through the slot of the top piece, the square shaft 19 located between the bottom 10 and the spring, the cam 20 and the recess 21, and the lever 18 having an arm extending through said slot, the shaft 23 located between the bottom 10 and the spring, the tooth 25 for engaging in the recess 21 of the first mentioned arm, and the stud 26 on which the cam 20 may act, as and for the purpose decribed.

In witness whereof I have hereunto set my hand.

HENRY WEXEL.

Witnesses:
JOSEPH A. MILLER, Jr.,
M. F. BLIGH.