

J. Koberle. *Button.*

No. 84,555.

Patented Dec. 1. 1868.

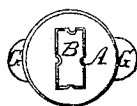


Fig. 1.

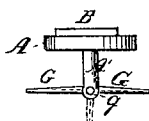


Fig. 2.

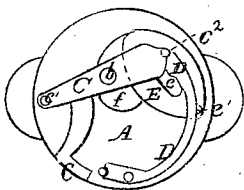


Figure 3.

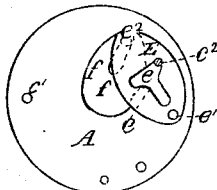


Figure 4.

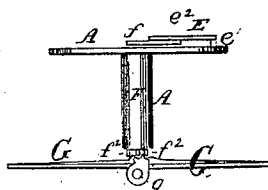


Figure 5.

Witnesses:

Inventor:

Publ. Buns.

Joseph Koberle

Wm. W. Hertel

United States Patent Office.

JOSEPH KOBERLE, OF ST. LOUIS, MISSOURI.

Letters Patent No. 84,555, dated December 1, 1868.

IMPROVEMENT IN BUTTONS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH KOBERLE, of St. Louis, in the county of St. Louis, and State of Missouri, have made certain new and useful Improvements in Sleeve-Buttons, Shirt-Studs, and similar fastenings; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of this invention is in the arrangement of folding wings, which, by suitable mechanism within the head of the button or stud, are folded so that the button-shaft will easily pass into the button-hole or other slot, and are thereupon spread so as to prevent the return of said wings or the release of the button from the hole, except upon proper operation by the wearer.

To enable those skilled herein to make and use my said invention, I will proceed to describe the same fully, referring to the

Figures 1 and 2 as plan and elevation of the button or stud, housed and arranged ready for use.

Figures 3 and 4 are plans, after removing the button-covering plate and thumb-slide, to show the arrangement of interior parts.

Figure 5 is a central sectional elevation, indicating the devices directly operating the wings, to turn or fold the same.

I construct the button-casing or housing of any ornamental and appropriate form, and usually of the nobler metals.

The casing has an upper part, A, forming the head of the button or stud, and a lower cylindrical part, forming the button-shaft A'.

Over the top plate of the head A, I arrange the thumb-piece B, also of some ornamental shape. The operator simply presses this piece in direction parallel to the top-plate surface, and toward the pressure-slide c, (which shows through the side of the head A, as hereinafter mentioned,) and thereby the wings at the base of the button-shaft are folded, and a return-motion unfolds the said wings.

The other operating-devices connected herewith are as follows:

The thumb-piece B has a shaft, b, riveted to it, which passes within the housing A, there being a slot in said housing large enough to allow for the motion of said shaft b.

At the base, said shaft b is riveted to the "boot"-lever C.

At the "toe"-end of said boot-lever C is the pressure-slide c, and the lever C is hinged to the journal c', secured to the casing A. If the thumb-piece is moved, it will be seen that the lever C will turn about its journal, c', and bring the slide c beyond the edge of the casing A; hence, if said motion has been accomplished, and the wings of the button have been folded, the return-motion of the wings may be made by placing the finger upon the pressure-slide c, and forcing it back, and it will, by the direct connection of the parts, also return the thumb-piece B to its first place.

In order to guide and retain the boot-lever C in the

several positions to which it is moved, I employ the spring D, which presses against the top end of the lever C, the parts being formed as shown in fig. 3.

At the upper end of the lever C, I further arrange the tappet, c². This dips or projects into the slot e of the vibrating plate E, which turns about the journal e'. The form of said slot e is as shown in fig. 4. It will be hereinafter explained that the motion of the button-wings is achieved by the motion of the plate E radially about its journal e'. But it is plain that, so long as the tappet c² remains in the outward corner of the slot e, (as in the positions drawn in figs. 3 and 4,) the plate E cannot vibrate without moving the lever C; hence the parts are locked, and thus the position of the wings of the button is fixed securely, unless the operator, by moving the lever C, through the thumb-piece B, sees fit to release it. It will be seen that this arrangement is peculiarly valuable, because the button is held securely in its place in the button-hole, and cannot be lost or removed except by an operator.

As soon as the lever C has been moved far enough to cause the tappet c² to strike the edge e' of the slot e, the lever will (in moving further) turn the plate E, as before mentioned.

The plate E has a tappet, e', dipping into the straight slot f' of the plate f, at the upper end of the shaft F, and in turning E, the tappet e' will also turn the shaft F.

At the lower end of the shaft F are the prongs or teeth f², which operate the gear-teeth upon the wings G, thus turning the wings, to fold or unfold the same, as before described.

The position of the wings G, when folded, is indicated in fig. 2 by dotted lines. In the arrangement here shown, the two wings G are halved, and operated by four teeth on the shaft F, the said wings being pivoted at g in the shaft-housing A'.

The button or fastening thus described has the advantage of being fastened and unfastened by operating from the outer surface of the head A, thus avoiding the unpleasant crimping of shirt-bosoms and sleeve-cuffs caused in buttons which fasten by clasping under the bosom or cuff; and, moreover, owing to the lock above described, the fastening is made secure, avoiding loss of the button; and so forth. The wings G may be made of any size, so that the fastening in the button-hole may be secure under all contingencies of wear and tear.

Having thus fully described my invention,

What I claim, is—

1. Unfolding and folding the wings G, by a thumb-piece B or pressure-slide c, from the outer button-surface, substantially as set forth.

2. The lever C, operating in the lock-slot e of the plate E by the tappet c², substantially as and for the purpose set forth.

3. The plate E, its tappet c², the plate f, its slots f' and shaft F, operating the teeth f² and wings G, substantially as set forth.

JOSEPH KOBERLE.

Witnesses:

GEO. P. HERTHEL, Jr.,
WM. W. HERTHEL.