

(No Model.)

E. I. COOMBS.
SLEEVE BUTTON.

No. 362,426.

Patented May 3, 1887.

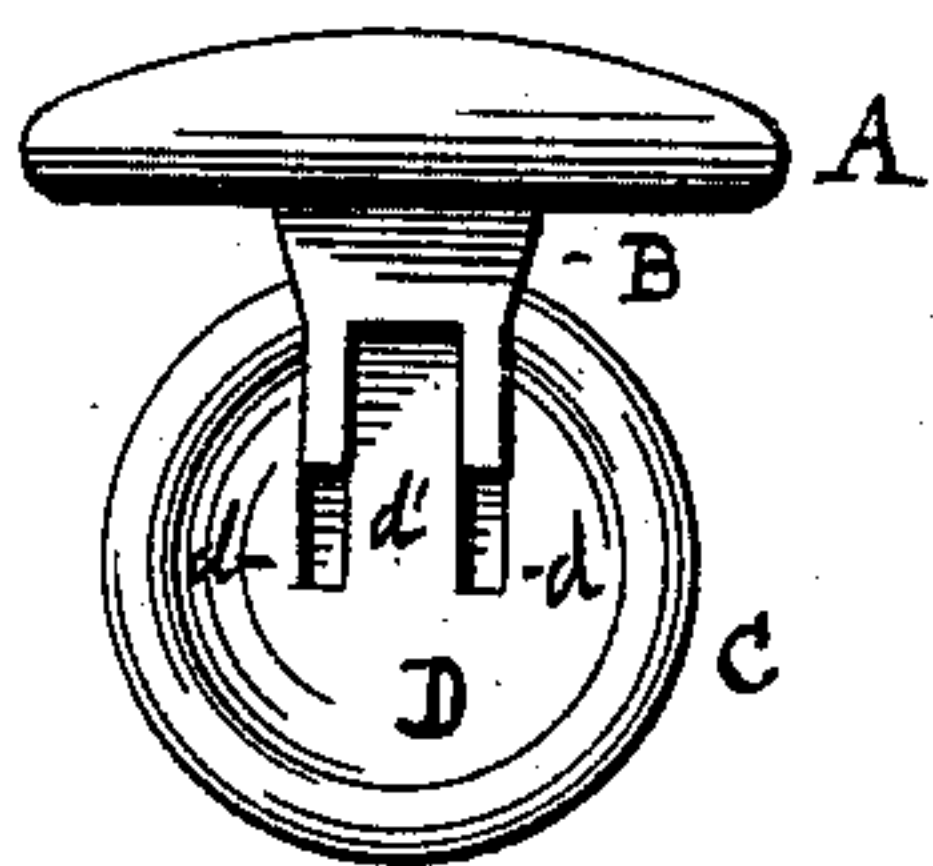


FIG. 1.

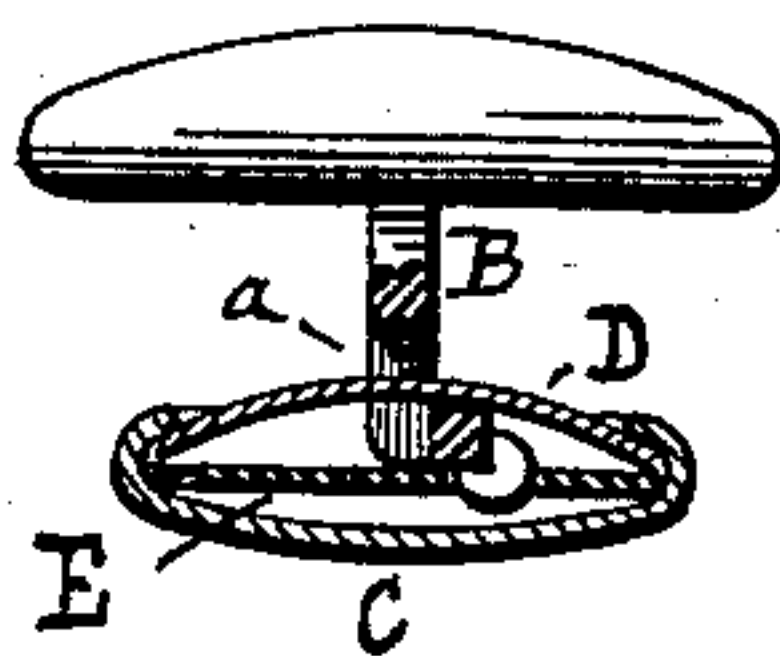


FIG. 2.

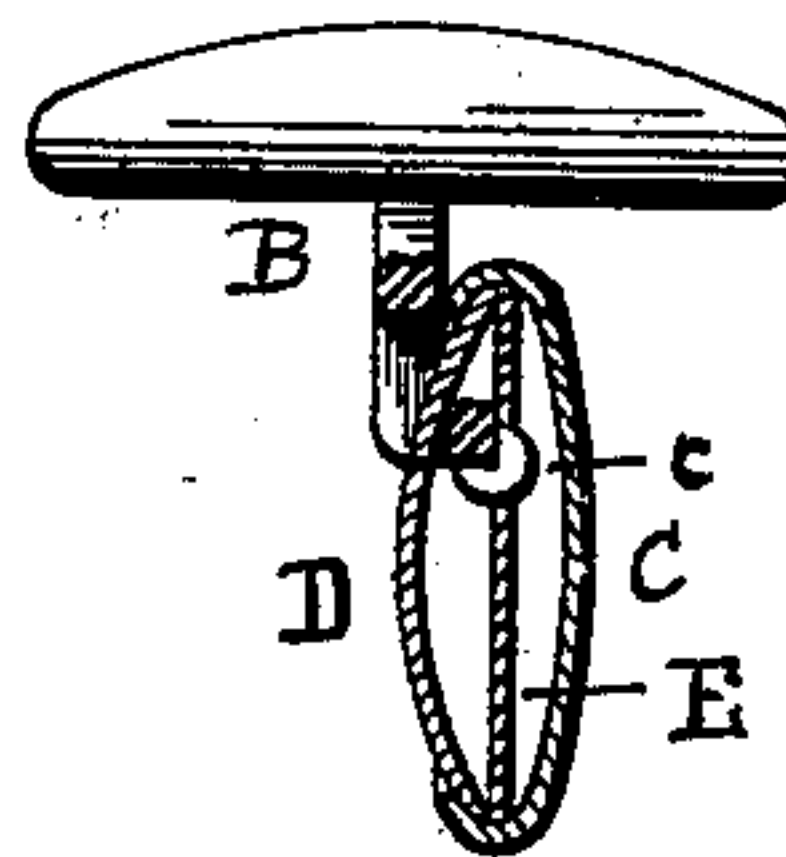


FIG. 3.

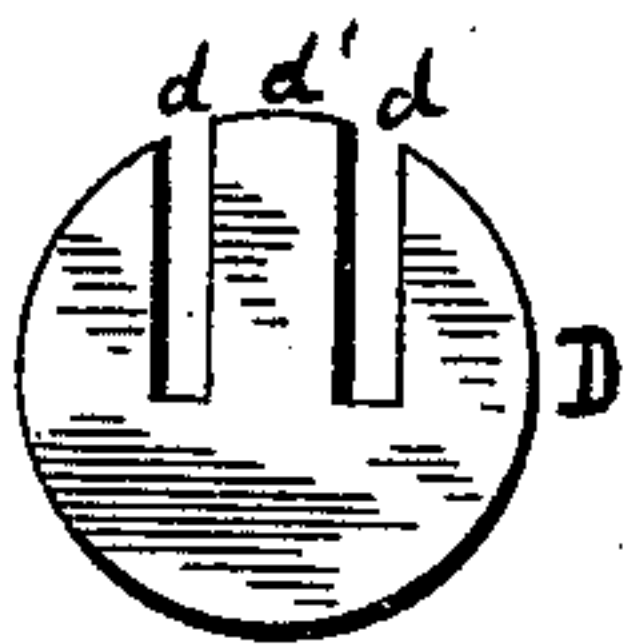


FIG. 4.

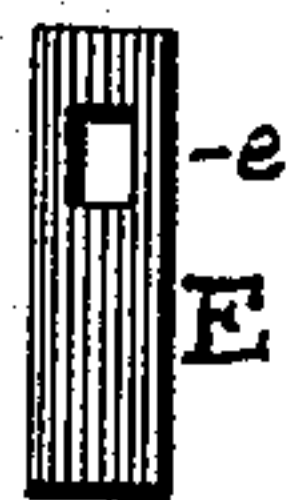


FIG. 5.

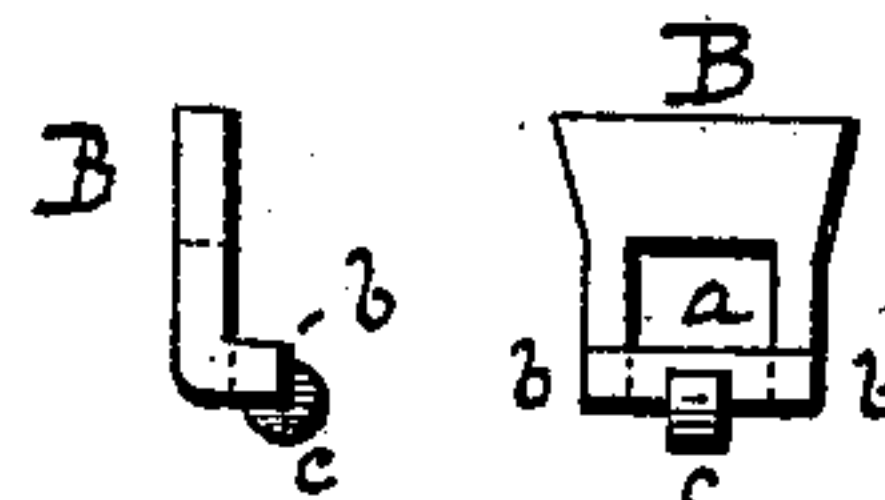


FIG. 6.

WITNESSES.

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EDGAR I. COOMBS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
GLADDING & COOMBS BROTHERS, OF SAME PLACE.

SLEEVE-BUTTON.

SPECIFICATION forming part of Letters Patent No. 362,426, dated May 3, 1887.

Application filed January 24, 1887. Serial No. 225,384. (No model.)

To all whom it may concern:

Be it known that I, EDGAR I. COOMBS, of the city and county of Providence, in the State of Rhode Island, have invented a certain new and useful Improvement in Sleeve-Buttons; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a front elevation of my invention with the shoe tilted. Fig. 2 is a side elevation of the same with the shoe closed down, the shoe and part of the post being shown in section on line *x* of Fig. 1. Fig. 3 is a side elevation of the same, partly in section on said line *x*, showing the shoe tilted. Figs. 4, 5, and 6 are detail views.

My invention consists of a shoe for buttons, in the usual form, having an interior flat spring, which is slotted near one end, and a bent shank or post which has a cross-bar to engage with said spring, and which also has a cylindrical foot whose axis is coincident with the outer edge of said cross bar, said foot being inserted in the slot of said spring, as hereinafter specified.

In the drawings, A represents the head or front of the button. B is the post or shank, which is bent at a right angle near its end, as shown in Figs. 2, 3, and 6. The post B has a central slot, *a*, and a cross-bar, *b*, integral therewith, whose outer sides are rectangular and square faced. Midway upon the cross-bar *b* a foot, *c*, is made in the form of a cylinder, having its axial line coincident with the line of the intersection of the two outer sides of the cross-bar *b*, as seen in Fig. 6.

The shoe C has a lining-plate, D, and confines the same by the overlapping of the edges, as seen in Figs. 2 and 3. The lining-plate D has two slots, *d*, and a tongue, *d'*. (See Fig. 4.) A flat spring, E, is placed diametrically within said shoe, as seen in Figs. 2 and 3, and has near its end a rectangular slot, *e*.

The parts are assembled as is shown in Figs. 2 and 3. The spring E is placed in the shoe C. The foot *c* of the post B is seated in the slot *e* of the spring E. The tongue *d'* of the lining-plate D is inserted through the slot *a*

of the post B, and all the parts are held in confinement by turning the flange of the shoe C over upon the lining-plate D. The foot *c*, thus seated in the slot of the spring E, becomes the fulcrum of the leverage of the post B. One of the square-faced sides of the cross-bar *b* of the bent post B is in contact and engagement with the upper surface of the spring E in either of the positions illustrated in Figs. 2 and 3. When the shoe is tilted or turned from one of said positions to the other, the sharp corner formed by the edge of the cross-bar *b* depresses the spring; but when the shoe is in either of the positions illustrated the normal action of the spring engages it with the cross-bar *b*, as shown, and holds the shoe in the desired position. As the shoe is turning the upright portions of the post B swing in the slots *d* of the lining-plate D, as seen in Fig. 1.

I am aware that it is not new to use bent lever posts in that class of buttons which have a tilting shoe; but the peculiarity of my invention consists in the form and location of the foot, which is the fulcrum of such lever or post. By the drawings it is apparent that the axial line or center of said foot is coincident with the edge or intersection of the two planesides which constitute the engaging-surfaces of the cross-bar. The consequence is that said axial line or edge is the uniform center of the oscillation of the post, and that I secure by this construction a shortening of the post equal in distance to the thickness of the post, because the whole thickness of the post is always at one side of said axial line. In buttons of this class heretofore made it has been common to put a foot upon the end of the post and seat the foot in a slot of a plate, or in some other socket within the shoe, to form a fulcrum; but such foot has hitherto been continuous of the post and in the plane of the end thereof, so that the transverse line of oscillation has been midway the thickness of the post. By my eccentric mounting of the post in the slot I am able to make use of a shorter post than has ever been known in buttons of this class.

In the construction of buttons it is always

desirable to make the post as short as possible, so that the shoe of the button may lie close to the cuff; hence it is important to secure such shortening in the manner above described.

5 The rectangular slot *e* of the spring E receives the foot *c* of the post B, and is prevented by it from lateral movement or displacement.

I claim as a novel and useful invention and
10 desire to secure by Letters Patent—

The combination of the button-head A, the bent post B, having the central slot, *a*, the

square-faced cross-bar *b*, provided with the cylindrical foot *c*, whose axial line is coincident with the outer edge of the cross-bar *b* 15 where the two engaging-surfaces thereof intersect the shoe C, the lining-plate D, having the slots *d* and tongue *d'*, and the spring E, having the slot *e*, all arranged and operating substantially as specified.

EDGAR I. COOMBS.

Witnesses:

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