

S. J. ALLEN.  
Collar-Button.

No. 222,172.

Patented Dec. 2, 1879.

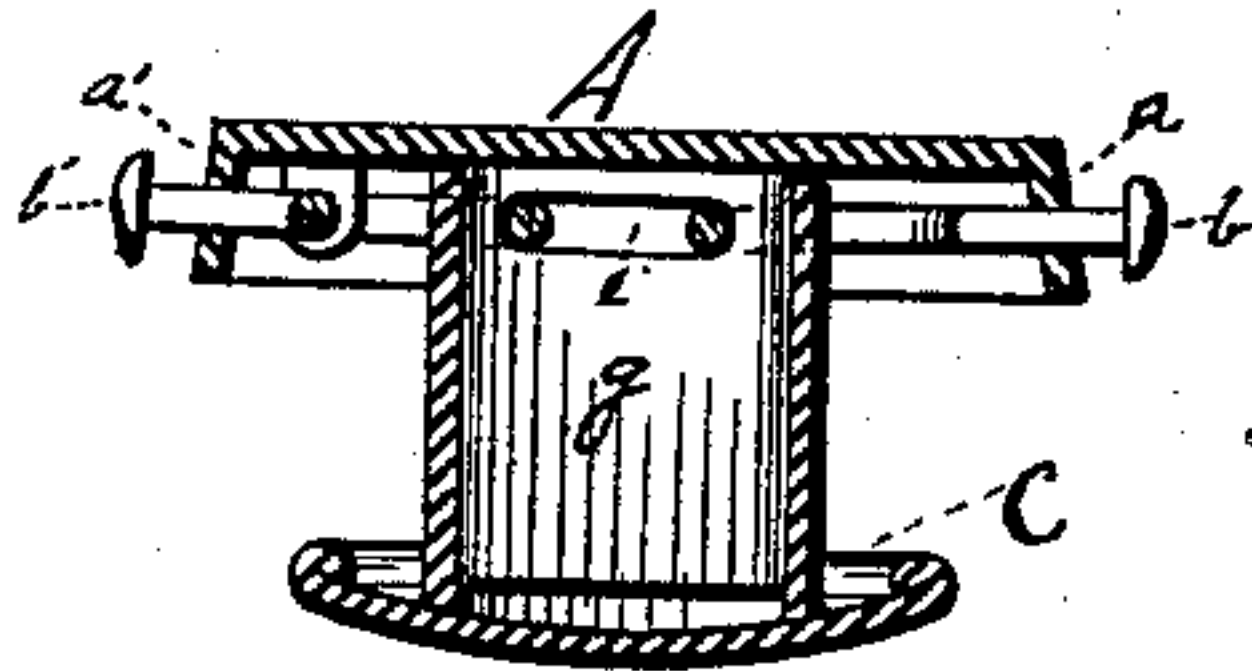


FIG. 1.

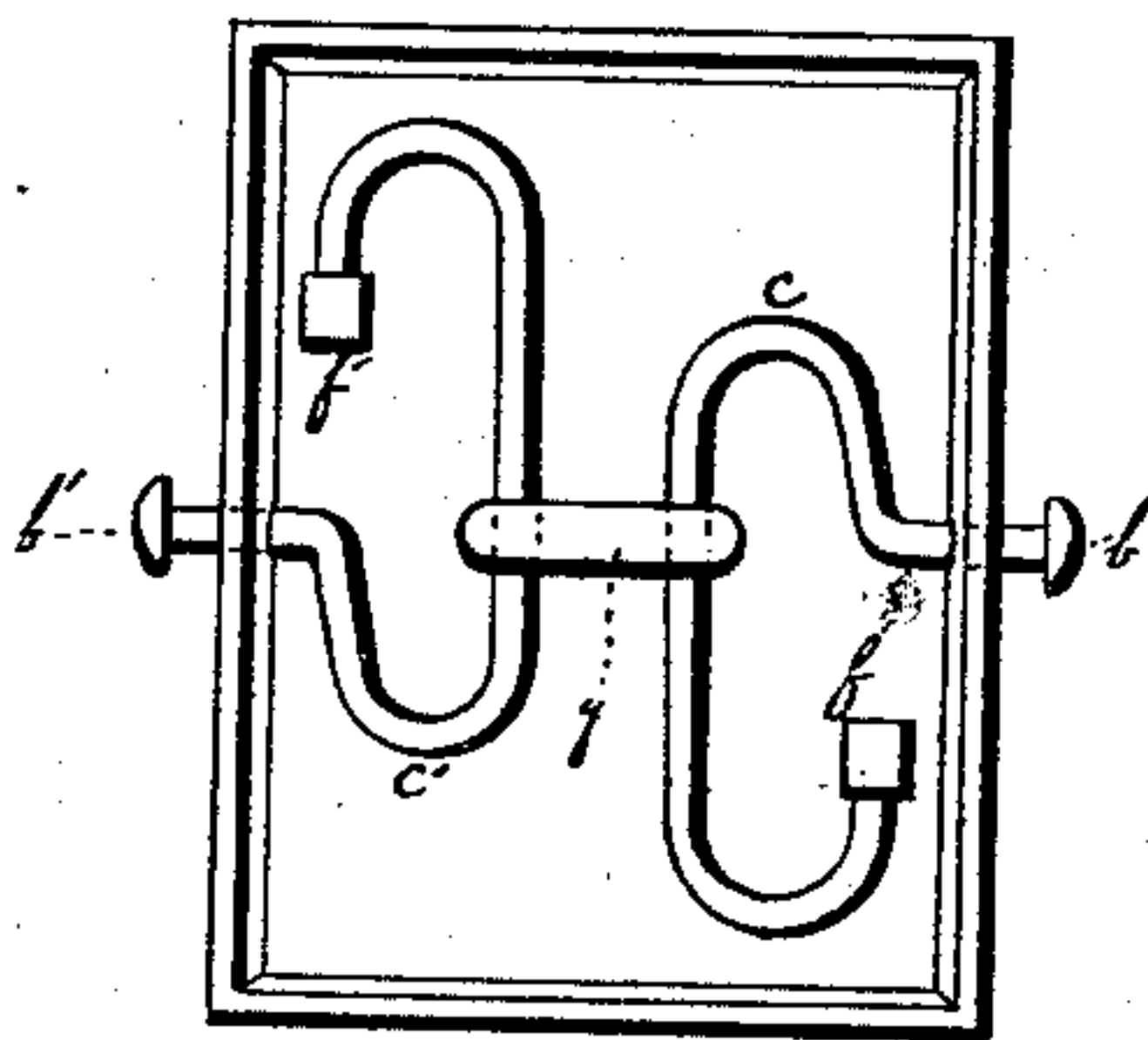


FIG. 2.

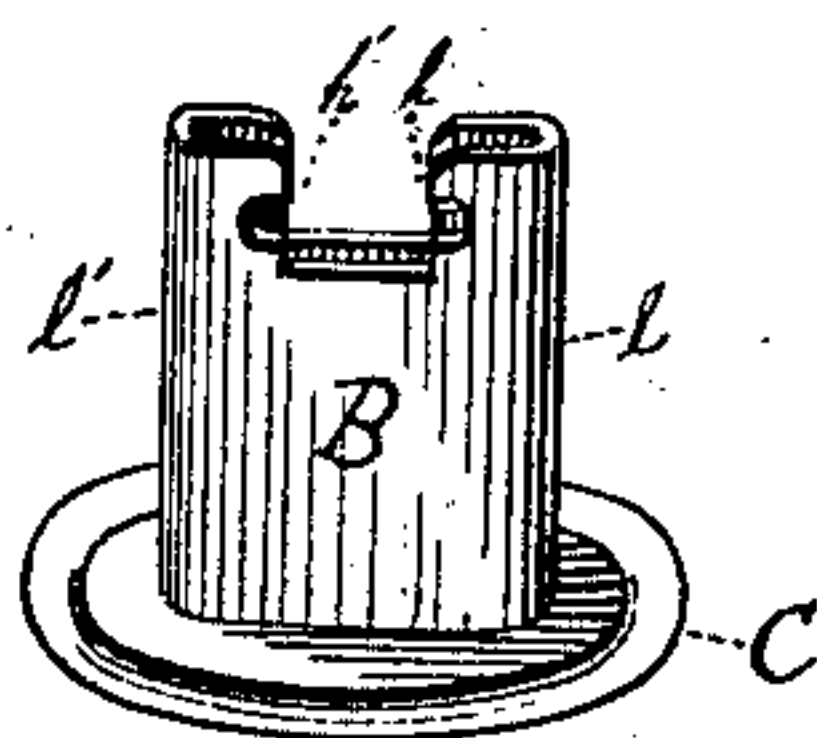


FIG. 3.

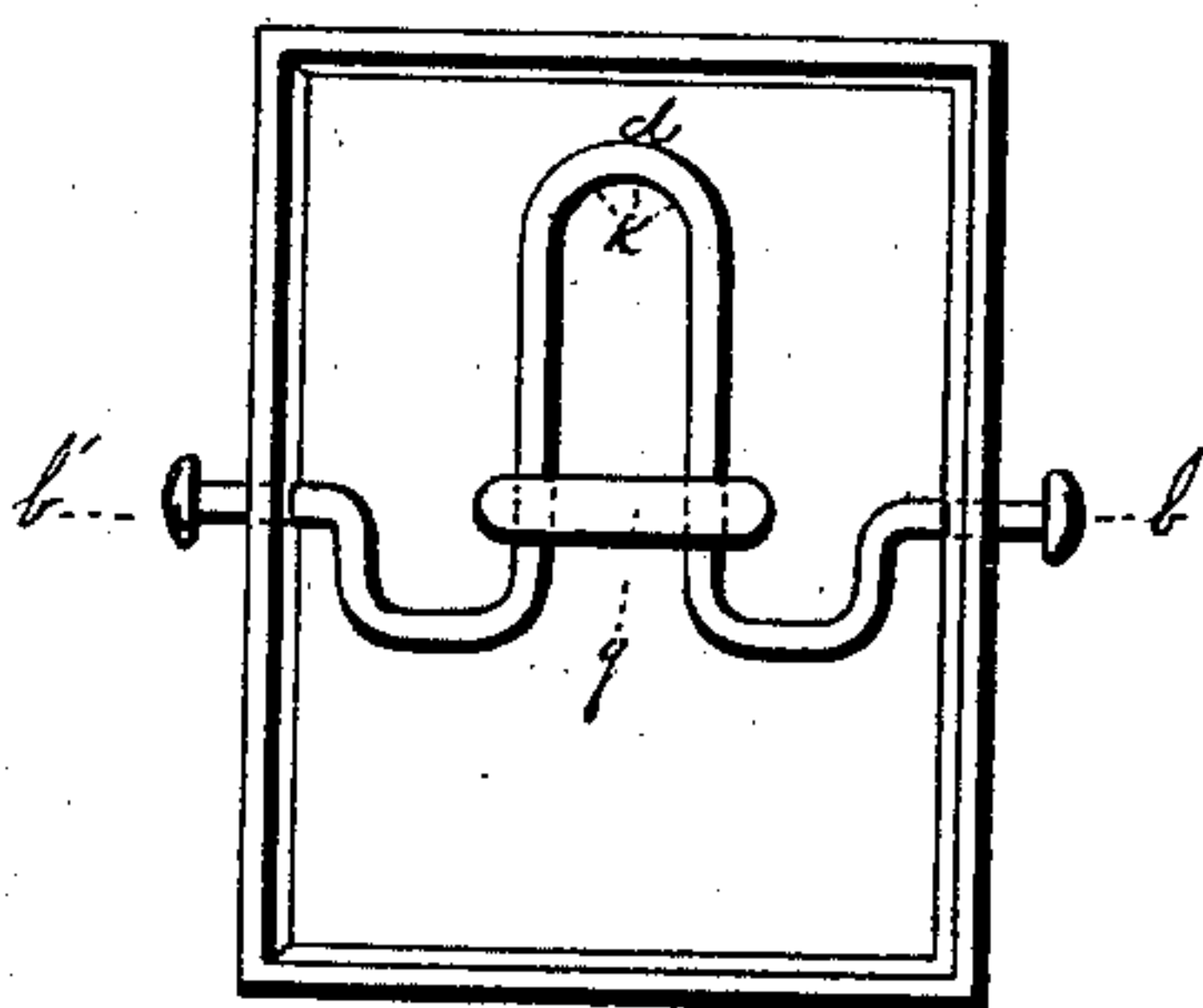


FIG. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN COLLAR-BUTTONS.

Specification forming part of Letters Patent No. 222,172, dated December 2, 1879; application filed October 13, 1879.

*To all whom it may concern:*

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

Figure 1 is a vertical section of the button, with the solid post attached to the front, shown in elevation. Fig. 2 is an interior view of the front of the button, showing a plan of the springs. Fig. 3 is a perspective view of the shoe of the button with its hollow post attached, showing the interior beveled catches in the end of the post. Fig. 4 is an interior view of the front of the button, having one piece of wire, instead of two, to serve as a spring.

My invention relates to that class of buttons in which the front and the back are made detachable and are held together, when adjusted, by the lateral pressure of a spring or springs.

My invention consists of two wire springs, one end of each projecting through opposite sides of the front of the button, passing from thence through a slot in the post attached to the front, the opposite end of each wire being fastened upon the front sides or lining of the button; or of one wire spring passing through a slot in the post attached to the front, the ends of the wire projecting from the sides, as above mentioned, such springs or spring engaging with interior beveled catches formed in the upper end of the hollow post attached to the shoe—that is, in the end not attached to the shoe.

The spring *d*, Fig. 4, and springs *c* and *c'*, Fig. 2, are made of German silver, copper, or other suitable metal. The ends *b b'* project through the sides *a a'*, Fig. 1. They pass through the slot *e*, cut in the solid post attached to the front near the base of the post. The spring *d* in Fig. 4 is attached at the bow *k*, or elsewhere to the front, by a clasp, by soldering, or otherwise.

*ff'*, Fig. 2, are cylindrical tubes soldered to the front or lining, in which tubes are fastened, by means of soldering or otherwise, two

ends of the springs *c c'*. Such ends may be attached, by soldering or otherwise, to the under side of the front of the button, or to a lining covering the under side of the front, or to the sides *a a'*, Fig. 1, without the use of the cylindrical tubes.

The button or stud may be made of any desired shape.

The front A, Fig. 1, has a solid flat post, *g*, with rounded edges, Figs. 1, 2, and 4. The post is fastened upon the under part of the front, or upon a lining covering the under part of the front.

The slot *e*, Fig. 1, is cut through the post near its base, sufficiently wide to allow of the passage through it of the springs *c c'*, Fig. 2, or *d*, Fig. 4. The slot is cut slightly above the base of the post, so that the springs, when passed through the slot, are raised sufficiently far from the front or lining to allow the beveled catches *h h'*, Fig. 3, to engage on each side of the post *g*, Figs. 1, 2, and 4, with the springs *c, c'*, or *d*, Figs. 2 and 4, by passing under the springs. When so engaged the springs are held securely by the slot, and in turn hold firmly the hollow post B by means of the catches *h h'*, Fig. 3.

To the inner side of the shoe C, Fig. 3, is attached a flat hollow post, with rounded edges *l l'*, in the top of which post are cut the interior beveled catches *h h'*. The hollow post B is of a size and shape to receive the solid post *g*.

The parts of the button are fastened together for use by inclosing the solid post *g* in the hollow post B and pressing the two parts together until the catches *h h'* are engaged with the springs, *c c'* or *d*, on each side of the solid post *g*. The parts are disengaged by pressing the ends of the springs *b b'* between the thumb and finger, whereby those portions of the springs which engage the catches are narrowed or pressed closer together and the catches disengaged from the springs, thereby allowing of the free separation of the parts.

The post B may be a cylindrical tube, and the post *g* a cylinder.

When the parts of the button are fastened together as above set forth, the slot holds the springs or spring in position, and the same



cannot be bent by any ordinary attempt to forcibly separate the parts.

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

1. A button or stud composed of two detachable parts, A C, one of which is provided with a hollow post having an end slot with interior catches, the other furnished with a solid post and a spring or springs adapted to enter the hollow post, and the spring or springs to be held in place by means of the slot and catches, all substantially as set forth.

2. In a button or stud composed of two detachable parts, the combination of a hollow post furnished with an open end slot having interior beveled catches, of a solid post adapted

to enter the hollow post, and a spring or springs adapted to co-operate with said slot and catches, whereby the parts may be held in place or detached, all substantially as set forth.

3. In a button or stud composed of detachable parts, the part A, provided with a spring or springs, projecting through its sides, and a solid post, in combination with the part C, having a slotted hollow post provided with interior beveled catches within the slot, all arranged and adapted to operate substantially as shown and described.

SILAS J. ALLEN.

Witnesses:

ALBERT C. ALLEN,  
IRVING CHAMPLIN.