

N. P. MAKER.  
Separable Button.

No. 231,965.

Patented Sept. 7, 1880.

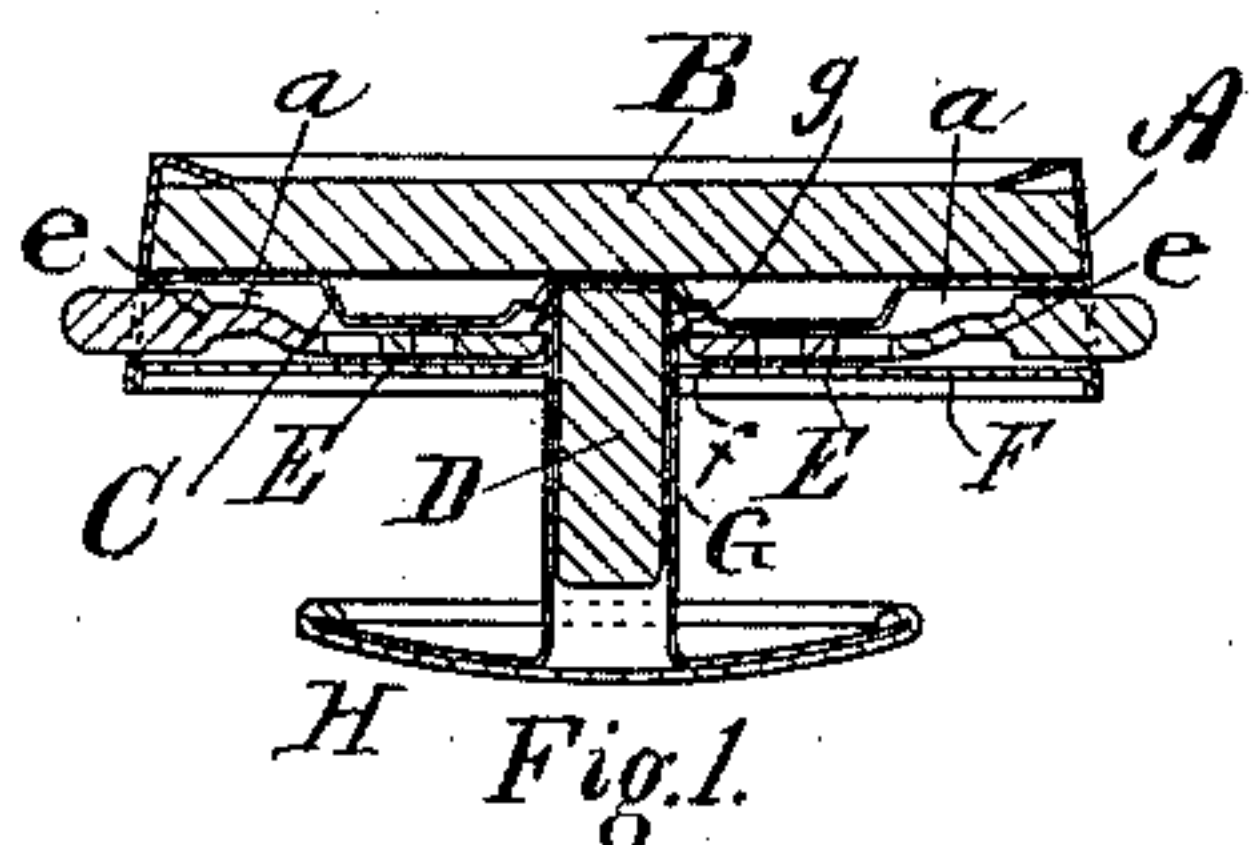


Fig. 1.

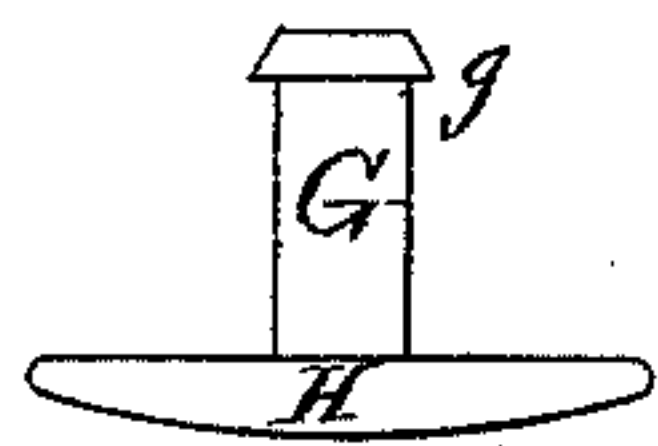


Fig. 2.

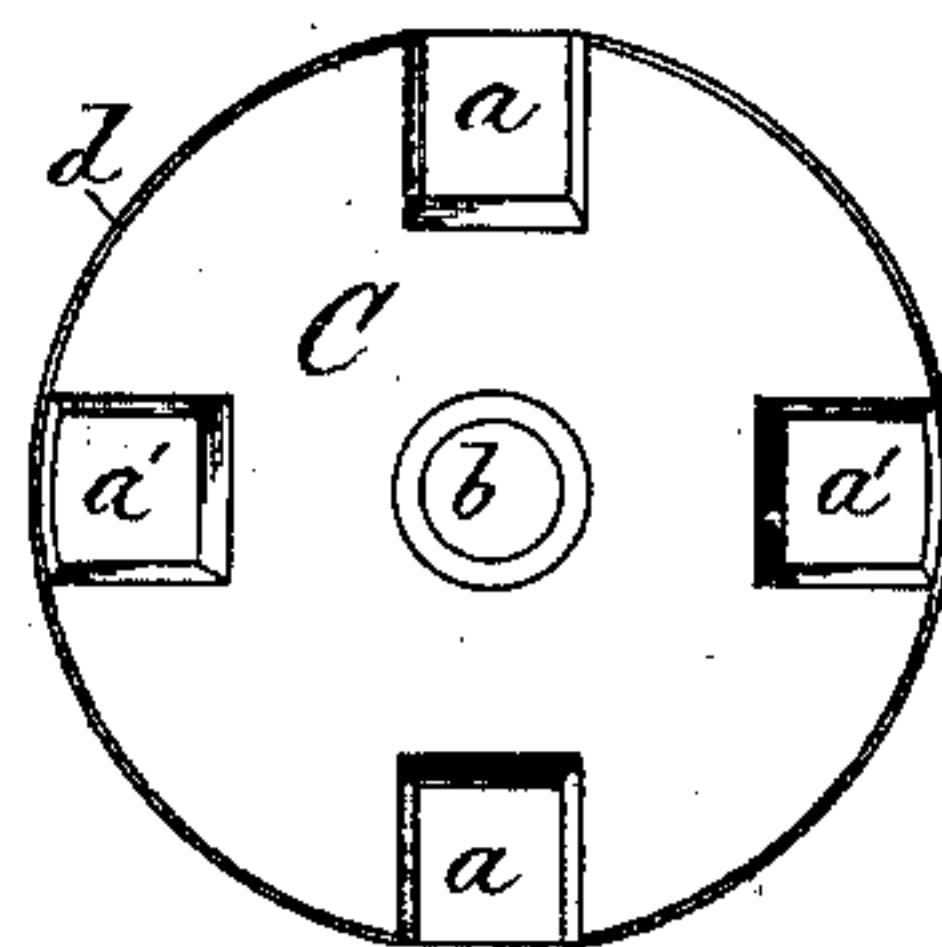


Fig. 4.

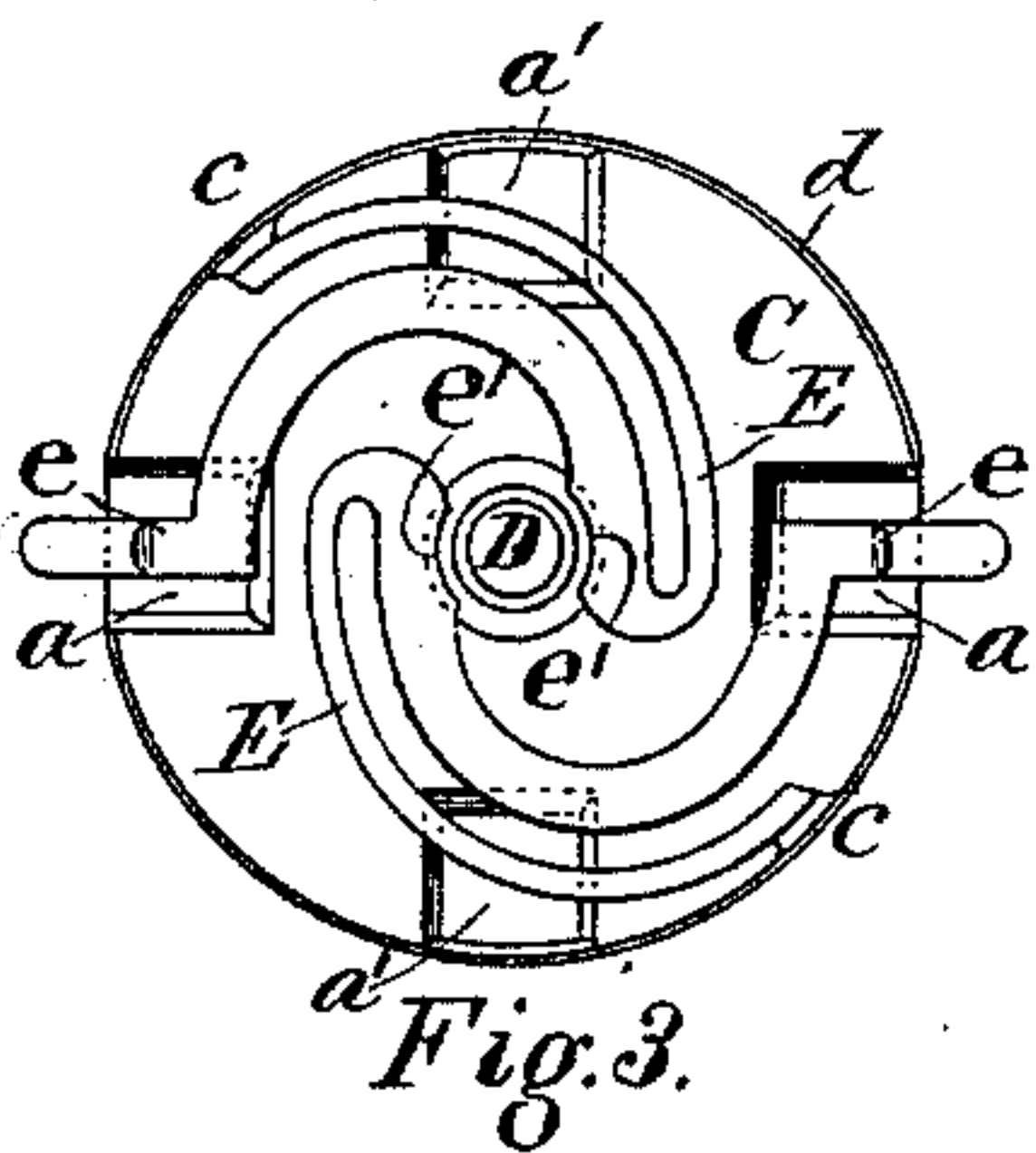


Fig. 3.

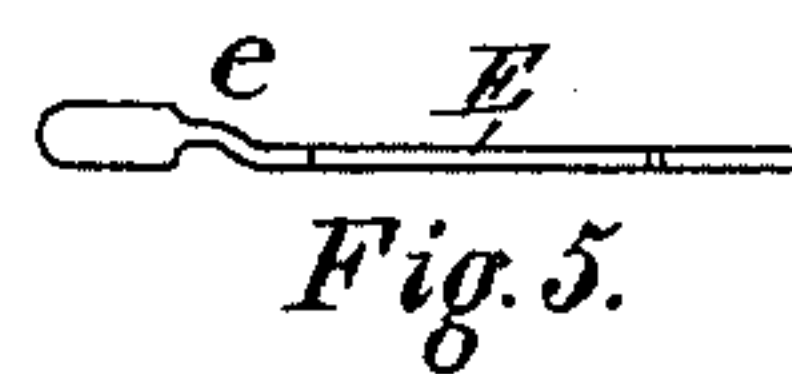


Fig. 5.

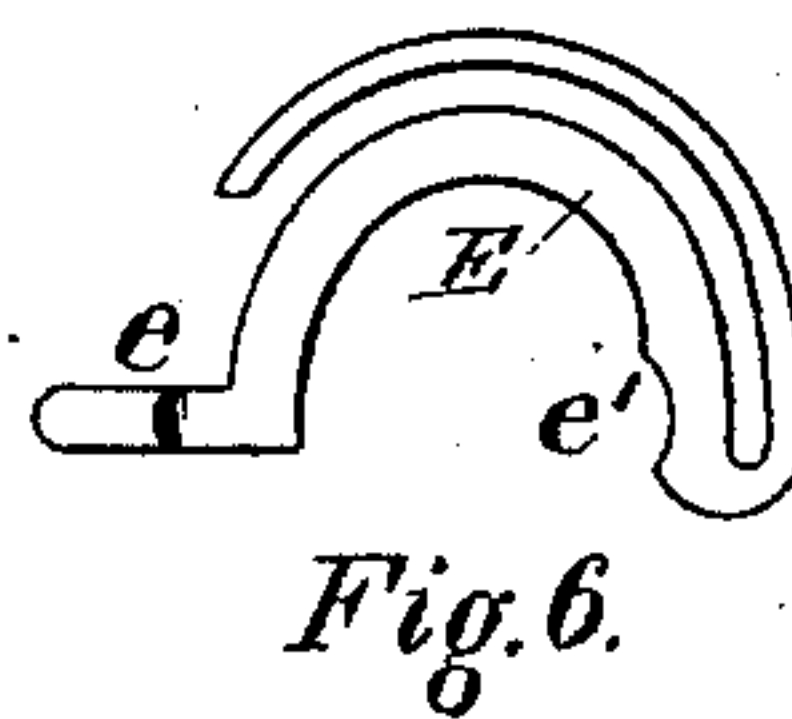


Fig. 6.

Witnesses.

Henry O. Jenkins.  
Alonzo B. Cross

Inventor.

Nathan P. Maker.

# UNITED STATES PATENT OFFICE.

NATHAN P. MAKER, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HIMSELF AND JOHN MOORE, OF SAME PLACE.

## SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 231,965, dated September 7, 1880.

Application filed February 24, 1880.

*To all whom it may concern:*

Be it known that I, NATHAN P. MAKER, of Providence, in the State of Rhode Island, have invented an Improvement in Separable Buttons, of which the following is a specification.

My invention relates to that class of separable buttons where the springs themselves form the catches, being operated to release the shoe by means of attached pushers; and it consists in a special combination of parts whereby the object may be secured in a cheap and practical manner.

Figure 1 is a section taken in the line of the pushers, showing the two parts of the button attached. Fig. 2 is an elevation of the shoe and its attached hollow post. Fig. 3 is a plan view of the springs and recessed spring-supporting plate. Fig. 4 is a separate plan view of the recessed plate. Fig. 5 is an edge view of the spring, showing the offset made in the pusher. Fig. 6 is a plan view of the spring.

In the accompanying drawings, A is the enclosing-rim of the button, and B the front plate. C is a thin plate provided with an encircling-flange, *d*, and slightly recessed at *a a*, *a' a'*, and *b*, and in the center of which recess *b* the solid post D is rigidly attached. The springs E E, cut from a plate of hard-rolled stock and having the projecting pushers *e e*, set off by bending from the plane of the springs, are attached to the rim of the plate C, at the points *e e*, by soldering or otherwise, the offset portion of the pushers occupying the recessed spaces *a a* of the plate C.

The plate B being first placed within the rim A, the plate C, with its attached springs E E and fixed post D, is placed against the back of the front plate, B, the recessed portions *a' a'* serving to keep the plate C in a plane parallel with the back of the plate B. The plate F, having a central perforation, *f*, suffi-

ciently large to admit the end of the hollow post G, attached to the shoe H, is pressed against the encircling-flange *d* of the plate C, and, the edge of the rim A being then spun down over the edge of the plate F, the whole front portion of the button will be securely and economically fastened together, the plate F constituting a support for the springs E E against an outward pull upon the shoe H.

The beveled point of the post G passes between the notches *e' e'* of the springs E E and forces the springs backward, so that upon the continued forward movement of the post the springs will clasp back of the flange *g*, and thus hold the two portions of the button together. Pressure upon the ends of the pushers will force the notched portion of the springs E E backward, thus releasing the post G and shoe.

The advantages of my improvement are the production of an easily-yielding spring with a positively-holding catch and economical construction.

I claim as my invention—

In a separable button, the combination of the rim A, front plate, B, and plate C, provided with the flange *d* and with the stamped recesses *a a*, *a' a'*, and *b*, and having a fixed post, D, secured in the recess *b*, with the springs E E, arranged upon opposite sides of the post D, at a short distance from its base, and provided with offsets at their pusher ends, by means of which they are made to drop into the recesses *a a*, and with the plate F, provided with a central perforation, *f*, all arranged and operating substantially as described.

NATHAN P. MAKER.

Witnesses:

HENRY F. JENKS,  
H. S. BABCOCK.