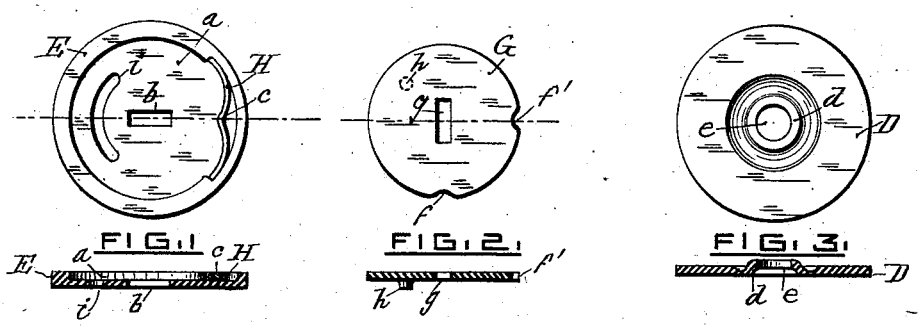
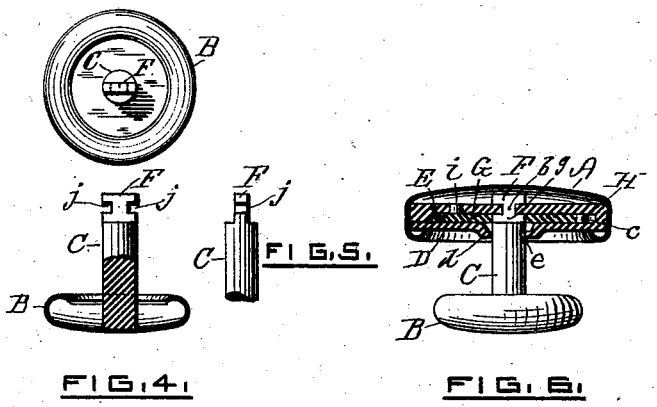
(No Model.)

F. S. HARRINGTON.

BUTTON.

No. 259,855. Patented June 20, 1882.





WITNESSES.

Socrates Scholfield

John Crawford

INVENTOR.

Frank S. Harrington

UNITED STATES PATENT OFFICE.

FRANK S. HARRINGTON, OF PROVIDENCE, RHODE ISLAND.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 259,855, dated June 20, 1882.

Application filed November 29, 1881. (No model.)

all whom it may concern:

Be it known that I, FRANK S. HARRINGTON, 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 in which the shoe and its post are connected to the head of the button by turning the button-head upon the post; and it consists in the combination, in the button-head, of an inclosed slotted catch-plate with a slotted and notched tumbler-plate provided with a stop and a tumbler-retaining spring and with a guide-plate for the post of the shoe.

Figure 1 represents a plan and central section of the slotted catch-plate. Fig. 2 represents a plan and central section of the slotted and notched tumbler-plate. Fig. 3 represents a plan and central section of the guide-plate for the shoe-post. Fig. 4 represents a plan and sectional view of the post and shoe. Fig. 5 represents a partial elevation of the post, taken at right angles to the view shown in Fig. 4. Fig. 6 represents the head of the button in central section and the post and shoe in elevation.

In the drawings, A represents the head of the button, B the shoe, and C the post attached to the shoe. To the back of the head of the button is secured the guide-plate D, provided with the central raised annular rim, *d*, surrounding the central perforation, *e*, made to receive and guide the post C of the shoe B. The recessed plate E, provided with a central elongated slot, *b*, adapted to receive the locking-spur F of the post C, is also secured within the head A, and the circular tumbler-plate G is placed in the recess *a* made in the plate E. The recess *a* is extended at one side to receive the spring H, provided with a projecting point, *c*, which enters the notches *f f'* at the edge of the tumbler-plate. The tumbler is also provided with a central elongated slot, *g*, to receive the locking-spur F of the post C, and with a pin, *h*, which enters the circular slot *i* in the plate E. The pin *h* and slot *i* serve to limit the movement of the tumbler-plate, and also of the head of the button, to one-quarter of a turn with the post and shoe, and the notches *f f'* of the tumbler-plate are so arranged relatively to the projecting point *c* of the spring and the pin *h* and slot *i* that the point *c* will drop into the notch *f'* when the pin brings up against the end of the slot *i* to lock the button.

At the end of the post C is placed the projecting notched locking-spur F, which, after entering the slot *g* of the tumbler-plate and the corresponding slot, *b*, of the plate E, and then being turned, will become locked to the head of the button by the plate E, the sides of the slot *b* entering the notches *j j* of the spur F, and when the spur F has been turned to the position at right angles to the entering slot *b* the tumbler-plate G will be held from further movement by the pin *h*, which strikes the end of the slot *i*, and the point *c* of the spring will enter the notch *f'* and hold the head of the button securely in position. At the reverse movement for unlocking the button the pin *h* will strike against the opposite end of the slot *i*, so as to leave the slots *b* and *g* in line with each other, and then the head A can be withdrawn from the spur F of the post and the parts of the button be thus separated. The slots *b* and *g* will then be held in line with each other preparatory to the reinsertion of the spur F by the point *c* of the spring, which enters the notch *f* of the tumbler-plate.

I claim as my invention—

In a separable button, the perforated guide-plate D of the head A, recessed plate E, provided with the central elongated slot, *b*, tumbler-plate G, provided with the notches *f f'*, stop *h i*, and spring H, in combination with the shoe-post C, provided with the notched locking-spur F, substantially as described.

FRANK S. HARRINGTON.

Witnesses:

H. S. BABCOCK,

S. SCHOLFIELD.