

(No Model.)

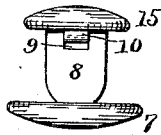
R. H. LEWIS.

BUTTON.

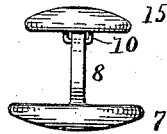
No. 344,743.

Patented June 29, 1886.

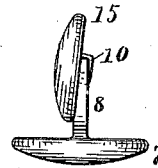
*Fig. 1.*



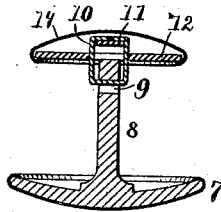
*Fig. 2.*



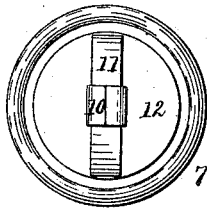
*Fig. 3.*



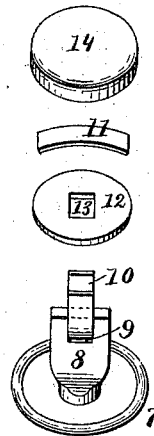
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES:

*Char. H. Luther Jr.*  
*Willis Fowler*

INVENTOR:

*Russell H. Lewis*  
*by Joseph A. Miller & Co.*

# UNITED STATES PATENT OFFICE.

RUSSELL H. LEWIS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO ROBERT S. CUTTING, OF SAME PLACE.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 344,743, dated June 29, 1886.

Application filed December 15, 1885. Serial No. 185,689. (No model.)

*To all whom it may concern:*

Be it known that I, RUSSELL H. LEWIS, of the city and county of Providence, and State of Rhode Island, have invented certain new and useful Improvements in Buttons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to the class of buttons known as "non-separable," and which have the shoe hinged to swing upon the shank in operating the button, to allow its easy insertion in and withdrawal from a button-hole.

The object of my invention is to provide a button of this class that is of simple construction, having but few parts, and which operates with certainty in fastening and unfastening garments, and which is durable and not easily deranged.

To the above purposes my invention is in the nature of a movable shoe composed of a spring-plate, a spring, and a shoe-cap, all peculiarly hinged by a clip to the end of the shank, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 represents a front elevation of my button normal. Fig. 2 represents a side elevation of Fig. 1. Fig. 3 represents a side elevation of my button with the shoe turned out of normal position for insertion or withdrawal. Fig. 4 represents an enlarged central vertical sectional view taken on a plane passing from front to rear of the button, as shown in Fig. 1. Fig. 5 represents an under side plan view of Fig. 4 with the shoe-cap removed. Fig. 6 represents an under front perspective of the several component parts of the button in order of their union.

In the said drawings like figures designate like parts throughout.

Referring to the drawings, the saucer-like head 7 has arising from the center of its inner face the flat shank 8, whose shape is well shown in Fig. 6. Near its free end the shank 8 has a perforation or rectangular slot, 9, running from front to rear. In this slot 9 takes the clip 10, which is formed from a strip bent rectangularly, when combining the button, to clamp and hold firmly the strip-like spring 11 down upon

the circular spring-plate 12, which has a central rectangular opening or slot, 13, and which normally rests upon the free end of shank 8, and at right angles thereto. Over the spring-plate 12 is sprung the shoe-cap 14. (Fully shown in Fig. 4.) The spring 11 normally keeps a strain upon the clip 10, tending to make the same press heavily in its slot-bearing, which runs parallel to the free end of the shank. The pressure of the free ends of spring 11 normally upon the spring-plate 12 tends to keep the plate seated firmly upon the free end of the shank against displacement. The clip 10 is bent into such area as to permit it to slip its bearings when the shoe 15 is pressed on in front or rear, and to be turned upon its side when the shoe is turned parallel to the shank, as shown in Fig. 3.

In the operation of the button the shoe 15 and the clip 10 maintain their relative positions, and only change relatively to the shank 8 when the shoe is depressed, whereby the clip slips through the slot 9 and shifts its bearing. The shoe is turned, as shown in Fig. 3, for insertion or withdrawal from a button-hole, and then turned back into normal position. In Fig. 6 the clip 10 has its free ends straight. These ends are subsequently bent, as shown in Figs. 4 and 5, to clamp the spring 11 when the parts of the button are united.

This button presents the important advantage of having few essential parts, and none of them frail.

The button, as shown, can be constructed almost free from solder, if desired.

Of course the principal parts of my invention can be variously modified without departing from the spirit of my invention, as hereinbefore described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the spring-plate fulcrumed upon the end of the shank, of the spring, and the clip, which hinges with said shank and secures said spring upon said spring-plate, substantially as set forth.

2. The movable shoe composed of the spring-plate resting on the end of the shank, and the spring, and of the clip, which works in the slot of the shank and secures said spring in position, and of the shoe-cap, for the purpose described.

3. The removable button consisting of the head bearing the slotted shank, which has movably set upon its end the shoe composed of the slotted spring-plate having the spring clamped thereon by the clip which works in the shank-slot, and of the shoe-cap, for the purpose described.

4. The combination, with the spring-plate 12, and provided with the slot 13, of the spring 11 and the clip 10, which works in the slot 9 in the shank 8, substantially as described.

5. The combination, with the movable shoe 15, composed of the spring-plate 12, provided with the slot 13, the spring 11, the bent clip 10, the shoe-cap 14, of the shank 8, provided with the head 7, and with slot 9, into which works said clip 10, substantially as set forth.

RUSSELL H. LEWIS.

Witnesses:

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