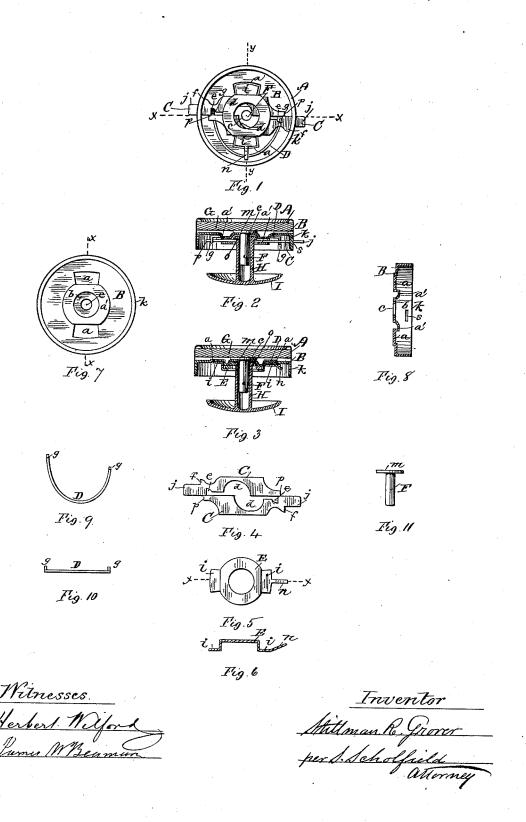
(No Model.)

## S. R. GROVER. BUTTON.

No. 422,882.

Patented Mar. 4, 1890.



## United States Patent Office.

STILLMAN R. GROVER, OF ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR TO EDWIN B. BULLOCK, OF SAME PLACE.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 422,882, dated March 4, 1890.

Application filed November 1, 1889. Serial No. 328,937. (No model.)

To all whom it may concern:

Be it known that I, STILLMAN R. GROVER, a citizen of the United States, residing at Attleborough, in the county of Bristol and State 5 of Massachusetts, have invented a new and useful Improvement in Buttons, of which the following is a specification.

My invention relates to the improved construction and arrangement of the several parts of the button, as hereinafter fully set forth.

Figure 1 represents a back view of the head of the button. Fig. 2 represents a section taken in the line x x of Fig. 1. Fig. 3 repre-15 sents a section taken in the line y y of Fig. 1. Fig. 4 represents a plan view of the pushers. Fig. 5 is a plan view of the holding-plate of the button-head. Fig. 6 represents a section of the same taken in the line xx. Fig. 7 20 represents a plan view of the back-plate of the button-head. Fig. 8 is a section taken in the line x x of Fig. 7. Fig. 9 is a plan view of the spring, and Fig. 10 an edge view of the same. Fig. 11 is an elevation of the solid post which is to be secured to the head of the button.

In the accompanying drawings, A represents the head of the button.

B is the back-plate, provided with the two 30 recesses a a, the raised portion a', the central recess b, and the central perforation c.

C C are the pushers, which are each provided with the semicircular recess d, the

notch e, and the projecting lip f.

D is the spring, which is made in semicircular form and provided with the turned ends g g, which are adapted to engage with the notches e of the pushers C.

The holding-plate E is provided with the 40 backwardly-turned wings i i, which are adapted to enter the recesses a a of the plate B, and are secured therein by any suitable means, and one of the wings i is provided with the inclined stem n, which is adapted to hold

45 the spring D in position.

The rim k of the button-head is provided with opposite perforations s, adapted to receive the projecting ends j of the pushers, and the post F is made solid and provided with a 50 flat head m, and is also made to fit the perforation c at the center of the plate B.

In putting the several parts of the button together the post F is first passed through the perforation c in the plate B, so that the flat head m will be upon the inner side of the 55 said plate, where it will be held by the faceplate of the button or stone G. The outer ends j of the pushers are then inserted into the perforations in the rim k of the buttonhead, the turned ends g g of the spring D 60 placed in proper engagement with the notches e of the pushers, and the holding-plate E placed in proper position, so that the wings i iwill enter the recesses a a, and the inclined stem n will bear upon the spring D, to hold 65 the same in place. Then by soldering or otherwise securing the wings i i in the recesses a a the several parts of the button will be held in proper working position.

The hollow post H of the shoe I is provided 70

with the flange o, as common in separable buttons, and when the pushers C C are pushed back to release the post H of the shoe I the rear ends p of the pushers, by striking the inner side of the rim k, will form a stop for 75 the backward movement of said pushers, and the  $\lim f$ , which also strikes the inner side of the rim k, will form a stop against the outward movement of the same.

I claim as my invention-

In a button, the combination, with the backplate B, provided with the recesses a a, the raised portion a', the central recess b, and the perforation c, of the solid post F, having a flat head m, and held in the perforation c, 85 the perforated rim k, the pushers C C, provided with the notch e, for connection with the spring, the  $\lim f$ , for a stop against outward movement, and the recess d, the spring D, provided with the turned ends g g, and the 90 holding-plate E, provided with the wings i i, which are secured to the recesses a a of the plate B, and with a projecting stem n, adapted to hold the spring D in its proper position, substantially as described.

## STILLMAN R. GROVER.

Witnesses: PHILIP E. BRADY, SOCRATES SCHOLFIELD.