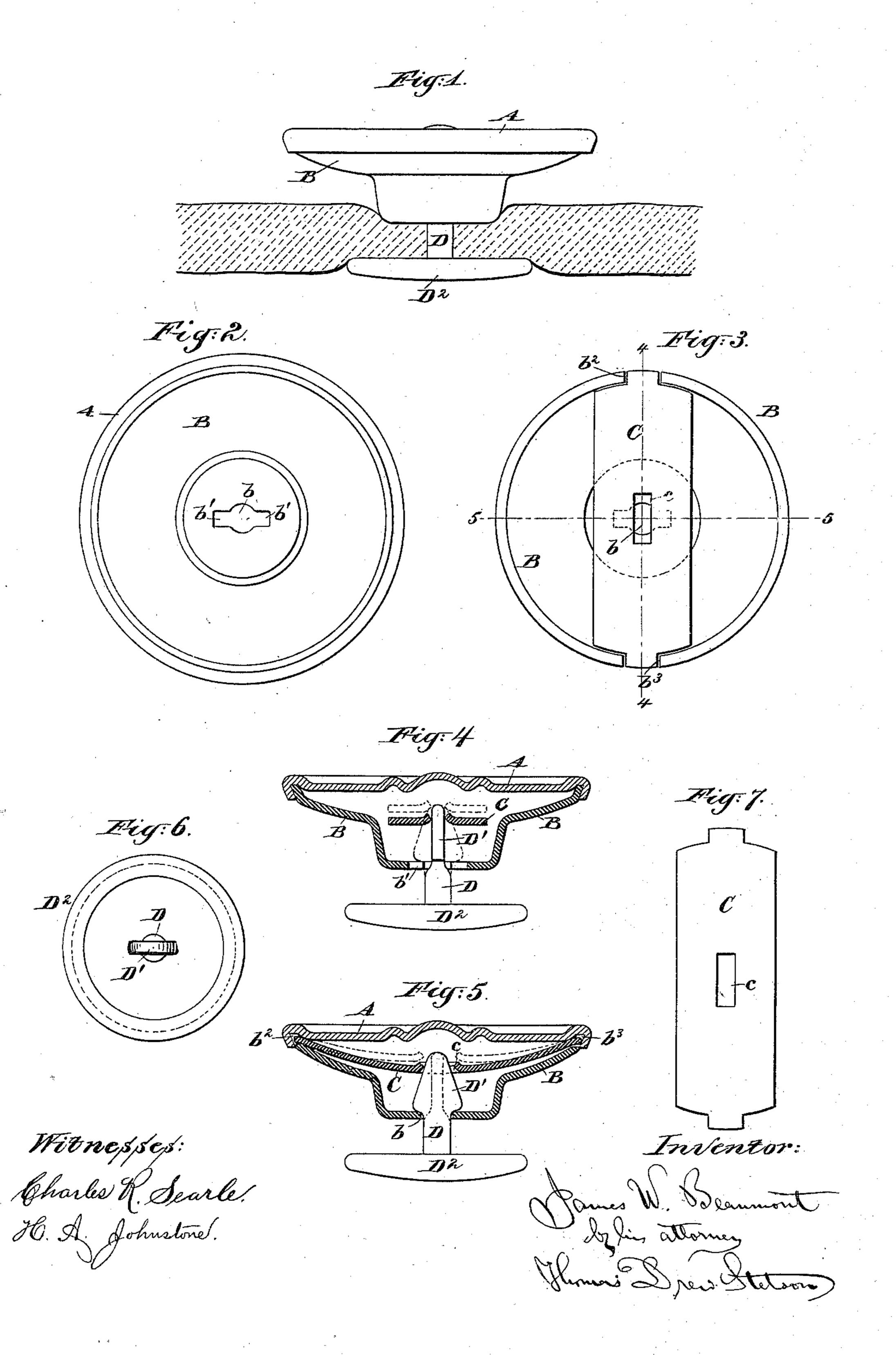
J. W. BEAUMONT. BUTTON.

No. 555,995.

Patented Mar. 10, 1896.



United States Patent Office.

JAMES W. BEAUMONT, OF WATERBURY, CONNECTICUT.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 555,995, dated March 10, 1896.

Application filed March 9, 1893. Serial No. 465,227. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BEAUMONT, a citizen of the United States, residing at Waterbury, in the county of New Haven and 5 State of Connecticut, have invented a certain new and useful Improvement in Buttons, of which the following is a specification.

My improvement applies to that class of buttons which are constructed in two parts, 10 adapted to be attached to a garment at any required point by thrusting the pointed shank of one part through the garment and engaging it reliably with the other part applied on

the other side of the garment.

In my improved button the shank is formed on a fastener which is applied from the wrong side (the inside) of the garment, and it engages with the main body which is presented on the right side (the outside) of the garment 20 by being forced in and partially turned therein. This general mode of fastening has been long known and approved. My invention makes it more secure. I produce a slotted opening in the hub of the back or collet and 25 produce on the shank of the fastener a correrespondingly-flattened end, which is triangular, the point adapted to pierce the fabric and divide it by separating the yarns, preferably without cutting them, and the back or shoul-30 ders square. This is inserted through the garment from the back, and the body of the button is applied thereon with its slotted aperture in the position to receive it. After the parts have been compressed together and par-35 tially rotated relatively to each other these square shoulders bear fairly against the inner face of the collet and prevent the removal of the button.

In the interior of the button-body I mount 40 a slightly-bent spring of thin hard metal extending across and engaged at each end with the periphery of the button, so that it cannot be rotated. This spring presents its slot transverse to the slot in the collet.

To set the button, the shank is inserted through the material from the back, and the button-body is applied with its slot in the position to receive the flattened portion of the shank. The latter cannot thus enter the slot 50 in the spring; but on the parts being compressed together with sufficient force the spring yields and allows the shank to be in-

serted so far that its flattened portion is entirely within the button-body. Now holding the parts thus strongly compressed together 55 they are revolved a quarter-revolution relatively to each other. This causes the flattened part of the shank to coincide in position with the slot in the spring and enters it. This allows the spring to resume its original 60 form and take a firm hold of the flattened portion of the shank. It forever after prevents the parts from being rotated in either direction, and consequently the button remains reliably fastened.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the in-

vention.

Figure 1 is a side view of the entire button 70 engaged in the garment. Fig. 2 is a view of the rear face of the body alone. Fig. 3 is a plan view of the collet with the cap removed, showing the spring in place. Fig. 4 is a central cross-section through the button and fas- 75 tener, taken on the line 44 in Fig. 3. Fig. 5 is a corresponding view at right angles to Fig. 4. It is taken on the line 5 5 in Fig. 3. Fig. 6 is a front view of the fastener alone. Fig. 7 is a face view of the spring detached.

Similar letters of reference indicate corresponding parts in all the figures where they

appear.

A is the front or cap of the body overlapping and engaged with the collet in the long- 85 approved manner. The collet B is formed with a hub of the ordinary character, except that its center is provided with a winged hole b b'. The main portion of this hole b is circular and of a size corresponding to the cylin- 90 drical portion of the shank D. The wings b'b' are small open slots adapted to allow the reception of the flattened portion D' of the shank when it is properly presented. The periphery of the collet is notched at two op- 95 posite points, as indicated by b^2 b^3 .

C is a spring of hard brass or other suitable material extending across the interior of the body of the button and engaged by its properly-formed ends with the notches $b^2 b^3$. In 100 the center of this spring is a slot c of proper size to receive the flattened portion D'of the

shank.

In applying the parts together the shank

strikes the spring with its flattened portion D' standing transverse to the slot c. In this position it cannot enter such slot, and on the parts being sufficiently compressed together 5 the spring C is deflected toward the front plate or cap A until the whole of the flattened portion D' of the shank is received within the button-body. Then, on turning the latter a quarter around, or holding the button-body 10 stationary and turning the shank around by its head D² to a corresponding extent, or by turning each part a little, so that the two shall be revolved to the proper extent relatively to each other, the flattened part of the 15 shank is brought to coincide with the slot cin the spring. This spring receives it and instantly resumes its original form, taking a reliable hold of the flattened portion D' of the shank to prevent its being turned in either 20 direction. Thereafter the button cannot be disengaged.

Modifications may be made without departing from the principle or sacrificing the ad-

vantages of the invention.

Instead of making the spring C a narrow strip of metal extending across the button it may be wider. I have shown the slot c as of V-shaped section, or having the metal immediately adjacent deflected, adapted to facilitate the entrance of the pointed shank, but it may be a plain slot. It is important to give the spring a just sufficient amount of elastic yielding. It must be sufficiently yielding to be deflected by the thrusting force received through the shank in attaching the parts and

yet sufficiently stiff when it has assumed its original position to hold the parts efficiently locked. The spring C may be sufficiently held against turning by engaging with only one notch, b^2 or b^3 . I prefer the whole as shown. 40

I claim as my invention—

1. In a two-part button a spring C in the interior of the main body having a slot c extending longitudinally of said spring, in combination with a collet or back forming a fixed 45 portion of the button having a hole b in its center and wings or notches b'b' forming open slots on opposite sides of said hole in a line crossing the line of the said slot c, adapted to serve with a fastener having a flattened 50 part and capable of being turned partially within the body substantially as herein specified.

2. In a two-part button, a body comprising a collet, having a slotted aperture b, b', and a 55 peripheral notch b^2 , in combination with a spring C within the body engaged in such notch, and having a slot c arranged transversely to the said aperture in the collet and with a fastener having a shank D, flattened 60 part D' and head D^2 , all arranged to serve substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in pres-

ence of two witnesses.

JAMES W. BEAUMONT.

Witnesses:

EDITH M. BEAUMONT, C. R. RUSSELL.