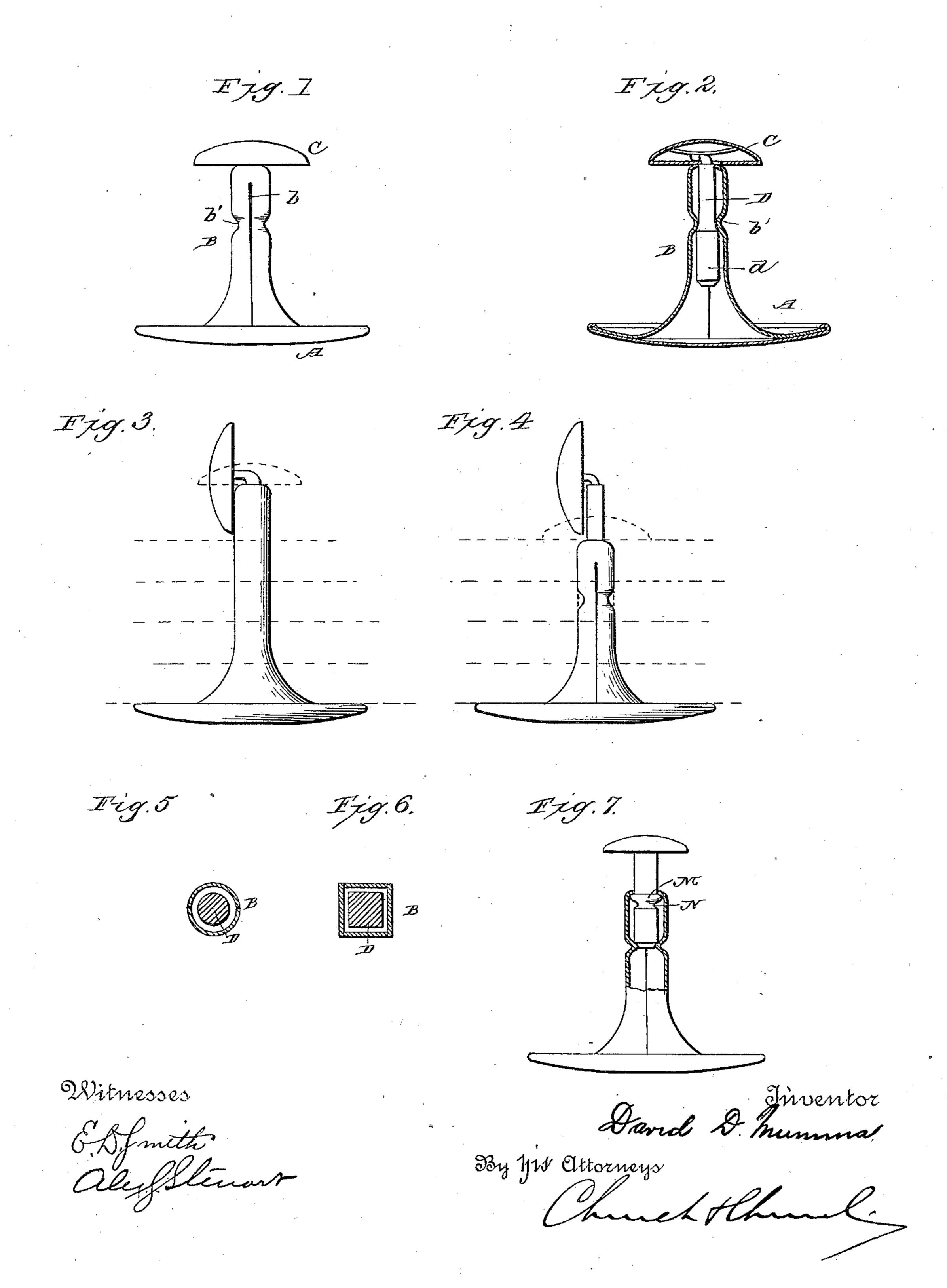
## D. D. MUMMA. BUTTON.

No. 427,703.

Patented May 13, 1890.



## United States Patent Office.

DAVID D. MUMMA, OF HARRISBURG, PENNSYLVANIA.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 427,703, dated May 13, 1890.

Application filed February 13, 1890. Serial No. 340,353. (No model.)

To all whom it may concern:

Be it known that I, DAVID D. MUMMA, of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain 5 new and useful Improvements in Buttons; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, 10 and to the letters of reference marked thereon.

This invention relates to certain improvements in buttons such as are adapted to be inserted and taken entirely out of the buttonholes, and has for its object to provide a but-15 ton which may be readily inserted or removed from the button-holes, and which, when inserted through a number of thicknesses of fabric, will confine the goods closely on each side; to which ends it consists in certain novel 20 details of constructions and combinations and arrangements of parts to be hereinafter fully described, and pointed out particularly in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is 25 a side elevation of a button constructed in accordance with my invention. Fig. 2 is a sectional view of the same. Fig. 3 is a view of an ordinary hinged shoe-button, illustrating the necessity for providing a long shank. 30 Fig. 4 is view of my button with the shank extended. Fig. 5 is a cross-section through the shank. Fig. 6 is a similar view of a modification. Fig. 7 illustrates another modification.

Similar letters of reference in the several

figures indicate the same parts.

The essential feature of my present invention consists in making the shank extensible. or capable of being elongated, so as to permit 40 more thicknesses of fabric to be held thereby, or to enable the button to be made thinner i. e., with the top and bottom closer together than ordinarily, and at the same time permit the same to be passed easily through the but-45 ton-holes, the invention being especially adapted for application to buttons having a hinge or pivoted shoe which tilts into substantially the plane of the shank in order to pass readily through the button-hole.

Referring to the accompanying drawings, A indicates the base, or what might be termed the "stationary face," of the button; B, the

shank, and C the shoe or movable face, of the button, mounted on a stem D, which is adjustably secured within the shank.

In order to permit the stem and shank to be readily adjusted with relation to each other, and thereby separate the two portions of the button more or less, the shank in the preferred construction is provided with a lon- 60 gitudinal slot or opening b, which extends nearly, but not quite, to the upper end, and with a depression b' passing horizontally around the same at about midway of its height, and the stem is provided with an en- 65 largement or head d. Thus when the stem is pushed into the shank as far as possible the depression b' closes in above the head dand prevents the ready withdrawal of the same, the sides of the shank forming a spring 70 which will close in after the shoulders of the head have passed, as will be readily understood. The top of the shank is narrowed in and the aperture through the same made small enough to prevent the passage of the 75 head d, thus forming a pocket in which the head is held firmly when the parts are separated, but the entire separation of the two parts is prevented.

The head d, it is obvious, may be dispensed 80 with and equivalent means employed to prevent the entire withdrawal of the stem, and at the same time permit it to be moved easily from one adjustment to the other—such, for instance, as illustrated in Fig. 7—wherein a 85 small enlargement M is provided to prevent the entire withdrawal of the stem and suitable depressions or recesses N for the engagement of the depression in the spring sides of the shank; but in the preferred construction 90 the head d is employed and the chambers above and below the central depression b'are made to conform to the shape thereof, so as to prevent any lateral play of the two parts of the button when in either position 95 of adjustment. The lateral play referred to is further prevented in a measure by elongating the head somewhat, as shown clearly in Fig. 2.

As before intimated, my extensible shank- 100 button is particularly adapted for use in connection with a hinged shoe. Thus it will be seen that by mounting the said shoe on the stem and drawing the same out before in-

serting or removing the button from the button-hole the shank proper may be made very much shorter than in the ordinary button, and the two parts of the button caused to 5 clamp the fabric more tightly and also present a more neat and finished appearance. This result is clearly illustrated in Figs. 3 and 4, Fig. 3 showing a hinged shoe-button without the extensible shank, in which it will be ro seen that the shank must be of such length as to permit the various thicknesses of fabric to lie between the edge of the hinged shoe and opposite face of the button, and when the shoe is turned back to normal position, as 15 indicated in dotted lines, quite a space is left between the fabric and shoe. In Fig. 4, on the other hand, the shank need only be of the same thickness as the fabric, or approximately the same, and when the shoe is tilted, 20 so as to pass through the button-hole, the shank is drawn out or elongated to such an extent that the fabric readily passes down below the edge of the shoe, after which the shoe may be turned back to normal position and 25 the two parts of the button pushed together, bringing the shoe down squarely upon the fabric.

Any preferred style of hinged shoe may be employed, and as the particular style does not form any part of my present invention, I have not deemed it necessary to describe the same herein.

It is desirable in many instances to prevent the shoe and shank from turning with relation to each other, and this may be accomplished by forming the shank and stem of

irregular shape—square, for instance—as shown in Fig. 6, although it is obvious that any other shapes may be employed to accomplish the desired end.

Having thus described my invention, what

I claim as new is—

1. In a button such as described, the combination, with the spring-shank having the upper end contracted and the depression at 45 substantially the center, forming a pocket at the upper end, of the shoe having the stem with the enlarged head fitting within the shank, said enlargement being adapted to fit within the pocket when the parts are separated, whereby they are held in adjusted position, substantially as described.

2. In a button such as described, the combination, with the hollow shank having the longitudinal opening extending up to a point 55 near the top, the integral upper end, and the central depression forming a spring-pocket, of the shoe having the stem fitting within the shank, and provided with the elongated head at the lower end, substantially as described. 60

3. In a button such as described, the combination, with the tubular spring-shank having the longitudinal opening, contracted integral upper end, and central depression, of the stem having the head for engaging said de-65 pression and contracted integral end, and the pivoted shoe mounted on the upper end of the stem, substantially as described.

DAVID D. MUMMA.

Witnesses:

WM. H. MIDDLETON, M. W. JACOBS.