## T. W. F. SMITTEN.

BUTTON OR STUD.

No. 307,598.

Patented Nov. 4, 1884.

Fig. 1.
A C
Fig.3.
$\begin{bmatrix} \mathbf{B} \\ \mathbf{c} \end{bmatrix}$

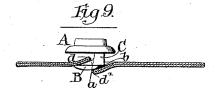












Witnesses:-Louis M. Hobilehead. Comil Pelmary

Inventor:Thomas M.F. Smitten
lyshis attips
Brown & Hall

## UNITED STATES PATENT

THOMAS W. F. SMITTEN, OF BROOKLYN, NEW YORK.

## BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 307,598, dated November 4, 1884.

Application filed July 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. F. SMITTEN, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and 5 State of New York, have invented a new and useful Improvement in Buttons or Studs for Cuffs, Collars, and Shirt-Bosoms, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to buttons or studs in which the back plate or foot is rigidly con-

nected with the post.

The object of the improvement is to facilitate the insertion of such a button into the but-15 ton-holes; and to this end it consists in the construction of the post with one side or edge so inclined to the back plate or foot, at or near its junction therewith, that the said side or edge will combine with the outer face of the 20 back plate or foot to form a wedge, the point of which is presented in a direction away from the post and toward the edge of the shoe. On the introduction of the back plate or foot into a button-hole the wedge so formed will force 25 one edge of the button-hole outward and the other inward, and so separate the said edges that the shoe may easily pass through the hole.

Figures 1 and 2 are side views, at right angles to each other, of a sleeve-button construct-30 ed according to my invention. Fig. 3 is a back view of the same. Figs. 4 and 5 are side views, at right angles to each other, of a button, illustrating a modification of my invention; and Fig. 6 is a modification of the same. Fig. 7 35 is a side view of a button, illustrating another modification; and Fig. 8 is a back view of the same. Fig. 9 exhibits a side view of a button and a section of a portion of a cuff, taken through a button-hole transverse to the length 40 of the latter, illustrating the introduction of

the button into the said hole.

Similar letters of reference indicate corresponding parts in the several figures.

A is the head of the button, B is the back 45 plate or foot, and C is the post, all rigidly connected.

a designates the inclined side of the post, which combines with the outer face of the back plate or foot to form a wedge. The post may I

have its transverse section flat, as shown in 50 Figs. 1, 2, 3, 7, and 8, or round, as shown in Figs. 4, 5, 6. The back plate may be of any suitable shape, and may be either concentric to the head, as shown in Fig. 8, or eccentric thereto, as shown in Figs. 3 and 6.

D designates the cuff, and d d' the edges of

the button-hole.

To insert the back plate or foot, B, into the button hole, that part of its edge which is next the inclined edge or side a of the post is first 60 introduced, and the said plate or foot is then pushed in between the edges  $d\ d'$  of the button-hole in such manner as to raise one edge, d, and to depress the other edge, d', by the action of the wedge formed by the edge a of the 65 post and the outer face of the back plate or shoe B, as shown in Fig. 9. The edges d d'having been thus widely separated, the edge b of the back plate or foot farthest from the inclined edge a of the post will easily pass the 70 edge d' of the button-hole, and the back plate or shoe thus passes entirely through the hole. The back plate or shoe having been inserted in this way, first through one and then through the other button hole of a cuff, is turned, to 75 bring the inclined side a of the shank lengthwise of the button-holes, in which position the button will be securely retained in the buttonholes. This turning of the button in the hole will effect itself automatically when the cuff 80 is left free.

In all the examples of my invention the point of the wedge is presented in a direction away from the post and toward the edge of

What I claim as my invention, and desire to

secure by Letters Patent, is-

A button or stud having a fixed back plate or foot and a fixed post, one side or edge of which is inclined to form a wedge with the 90 outer face of the back plate or shoe, the point of the wedge being presented in a direction away from the post and toward the edge of the shoe, substantially as herein described. T. W. F. SMITTEN.

Witnesses:

FREDK. HAYNES, MATTHEW POLLOCK.