

(No Model.)

I. R. DUNHAM.
BUTTON OR STUD.

No. 250,429.

Patented Dec. 6, 1881.

Fig. 1

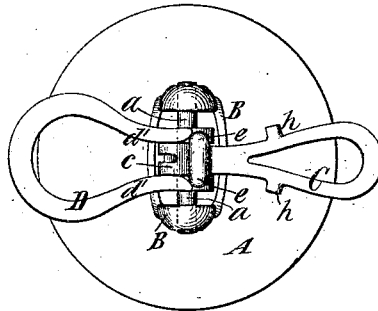


Fig. 2

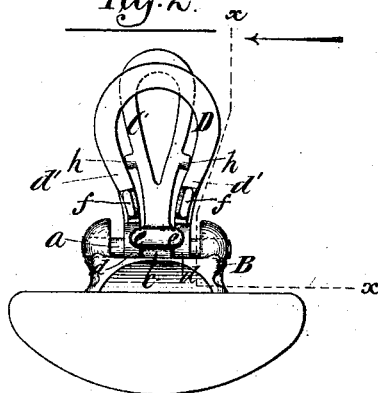


Fig. 3

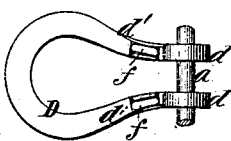


Fig. 3

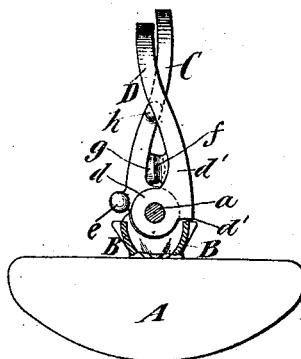
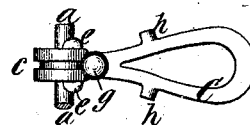


Fig. 4



Witnesses:-

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Wm. H. Brown

UNITED STATES PATENT OFFICE.

IRA R. DUNHAM, OF NEWARK, NEW JERSEY, ASSIGNOR TO GEORGE F. GLEASON, OF SAME PLACE.

BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 250,429, dated December 6, 1881.

Application filed September 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, IRA R. DUNHAM, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buttons or Studs, of which the following is a specification.

My invention is applicable particularly to sleeve and cuff buttons, but may also be embodied in studs and analogous articles.

The invention relates to the class of sleeve-buttons and studs in which two feet are hinged to a single post, so that they may be turned up approximately into line therewith, to enable them to be inserted in a button-hole, and then turned down into a position approximately at right angles with the post, to prevent their withdrawal from the button-hole.

The invention consists in certain novel details of construction, hereinafter particularly described, whereby the utility of such buttons and studs is enhanced and their appearance improved.

The accompanying drawings are made upon a greatly-enlarged scale, for the sake of clearness. In them Figure 1 represents a back view of a button embodying my invention, with the feet adjusted so as to extend in opposite directions transversely to the post. Fig. 2 represents a side view of the button, with the feet turned up, looking in a direction transverse to the pivot. Fig. 3 represents a section upon the dotted line *x x*, Fig. 2, with the feet turned up; and Figs. 4 and 5 are views of the two feet detached, representing the sides thereof which are toward the head or top of the button when said feet are turned down transversely to the post.

Similar letters of reference designate corresponding parts in all the figures.

A designates the head or top of the button, and B the post, which is of any suitable construction.

In my button the post is hollow, as clearly seen in Fig. 3, and *a* designates a pivot secured at its two ends therein.

C D designate the two feet of the button, the forms of which are shown clearly in Figs. 4 and 5, and which are hinged by the common pivot *a*, so that they may be turned down in a

position transverse to the post B, as seen in Fig. 1, or up into a position in line with the post, as seen in Figs. 2 and 3. The foot C has but a single eye, *c*, at the end which is hinged upon the pivot *a*; but the foot D is bow-shaped, or U-shaped, and has an eye, *d*, at the end of each arm *d'*, the eyes being at a considerable distance apart. The two arms, *d'*, of the outer foot, D, straddle the inner foot, C, and their eyes *d* fit upon the pivot *a*, on each side of the eye *c* of the foot C, as best seen in Fig. 1. When the two feet are turned up, as seen in Figs. 2 and 3, the foot C fits within or passes obliquely through the bow-shaped foot D, as seen in Figs. 2 and 3, and this enables the feet to be more readily inserted through a button-hole in a cuff or other article. The outer foot, D, is somewhat elastic, or rather its arms *d'* offer considerable resistance to any attempt to spring them apart, and when sprung apart and released at once spring together again by their resilience.

Upon the inner foot, C, is a cross-bar or projection, the ends *e* of which project beyond the sides of the eye *c*, and also beyond the inner sides of the arms *d'* of the outer foot, D, as seen clearly in Fig. 1, and form two cams. The extreme ends of the arms *d'* of the foot D are inclined outward, as clearly seen in Fig. 1; and it will be readily understood that when an attempt is made to turn up either foot the cams *e* will act upon the inclined ends of the arms *d'* and tend to spring them. Hence it will be seen that the arms *d'* form a spring for holding the feet in their turned-down position, and after the cams *e* pass between the arms they spring together again into their normal position. The arms *d'* of the foot D have projecting on the same side with the eyes *d* lugs *f*, which are inclined on the inner sides to form cams, as seen in Figs. 2 and 5, and when the two feet are turned up together, as seen in Figs. 2 and 3, and any attempt is made to turn either foot down, the cams *e* act upon the cams *f* and tend to force the arms *d'* apart. When the two feet C and D are turned up in line with the post B, as seen in Fig. 3, it will be seen that the ends of the arms *d'* of the foot D and the cross bar, the ends of which form the cams

e on the foot C, are in close proximity to the two sides or edges of the post B, and when the feet are turned very slightly in either direction from a position in line with the post the ends 5 of the arms *d'* or the cross-bar strike upon the edges of the post and precludes further movement.

On the side of the foot C which is next the head of the button when the feet are turned 10 down, is a lug or projection, *g*, (seen in Fig. 4,) and when the feet are turned down this lug or projection strikes upon one side of the post, while the cams *f* of the foot D strike upon the other side of the post, and thus preclude either 15 foot from being turned down past a position which is approximately at right angles to the post.

The inner foot, C, is provided at the outer edges with lugs *h*, as seen clearly in Figs. 1 20 and 4, and as the two feet are turned up and as they nearly approach each other, the lugs *h* act upon the inner sides of the arms *d'* of the foot D, and meet a very slight resistance, which is sufficient to prevent the foot C from moving

away from close contact with the foot D after 25 the lugs *h* pass the arms *d'* until it is moved forcibly with the fingers. When the button is inserted in a cuff one foot or the other will always project toward the outer edge of the cuff, and the feet may be unlocked and turned up 30 by simply inserting the thumb under the foot which projects forward.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the post B and 35 pivot *a*, of the inner foot, C, having cams *e*, and the outer foot, D, the arms *d'* of which are inclined at the ends and provided with cams *f*, substantially as specified.

2. The combination, with the post B and 40 pivot *a*, of the inner foot, C, provided with lugs *h*, and the outer bow-shaped foot, D, substantially as specified.

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Witnesses:

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