

(No Model.)

T. W. F. SMITTEN.
SLEEVE LINK.

No. 486,904.

Patented Nov. 29, 1892.

Fig. 1.

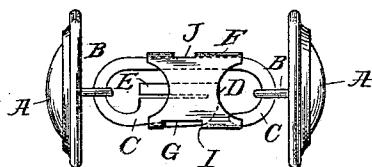


Fig. 2.

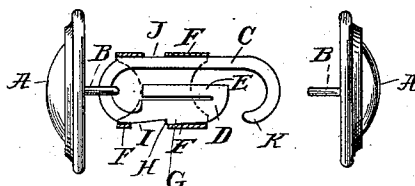


Fig. 3.

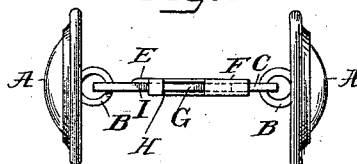


Fig. 4.

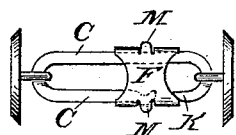


Fig. 5.

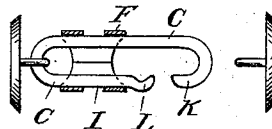


Fig. 6.

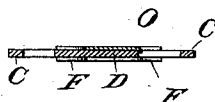


Fig. 7.

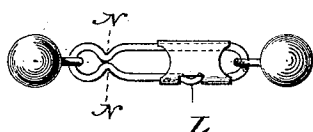


Fig. 8.

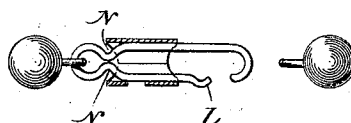
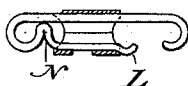


Fig. 9.



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UNITED STATES PATENT OFFICE.

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SLEEVE-LINK.

SPECIFICATION forming part of Letters Patent No. 486,904, dated November 29, 1892.

Application filed June 11, 1892. Serial No. 436,338. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. F. SMITTEN, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sleeve-Links, of which the following is a specification.

My invention relates to improvements in sleeve buttons, or as ordinarily called, "links;" and it consists, broadly stated, in a peculiar construction of the links or connecting devices between the two buttons, the characteristic feature of which is that the link is provided with an opening on one side, preferably near one of the ends, and also has a sliding locking-plate adapted to move longitudinally along the link, and which engages at appropriate places with spring-like parts or projections formed upon the link, whereby the locking-plates will be held in certain definite positions.

In the drawings hereof, Figure 1 represents an elevation of one form of my invention, showing the parts in the position which they occupy when in use during wear. Fig. 2 shows the position of the parts when the link is open and in position to be engaged with the loose button. Fig. 3 shows an edgewise view of the parts—in other words, a view taken from the top in Fig. 1. Figs. 4 and 5 are elevations of a modified form of my invention, showing the parts in their locked and unlocked positions, respectively. Fig. 6 is a view of a modification of the link shown in Figs. 1 and 2. Figs. 7 and 8 are respectively elevations of another form of my invention, showing the link closed and opened, respectively. Fig. 9 shows still another form of the link in an open position.

The characteristic feature of my invention pertains to all of the forms illustrated by me and may be employed in others not shown, the various forms illustrated possessing to a certain extent valuable features relative to each other, and sometimes it is desirable to employ these features and sometimes not, depending upon the expense that the article will bear. I therefore illustrate a number of forms. The invention, however, running through them all is substantially the same.

Referring first to Figs. 1, 2, and 3, A A are

the sleeve-buttons, provided with eyes B B, as usual.

C is a flat piece of metal made into substantially the form of a link, as shown, having at about its central interior portion a plate-like part D, from which is cut a spring E, which has a "set" somewhat diverging from the plane of the major portion of this plate.

F is the sliding and locking plate. It is made double—that is to say, in the form of a casing, which incloses the link C and is adapted to slide upon the link.

G is a projecting portion of the plate D, formed by cutting the recess or detent H into the edge of the plate.

I and J are two openings or holes made in the casing F. The opening J is made simply that the thumb-nail may enter it, so that it may be moved more easily from one end to the other. The opening I may also be used for the same purpose, but it also serves an additional function—that is to say, the projection G moves out into that opening when the plate F is in its locked position, as shown in Fig. 1. The projection may be made on the other side of the link and enter the opening J. It will be noticed that the left-hand arc of the link, or rather the left-hand end of the link, acts as a spring, so that the projection G is carried out into the opening I when they coincide in position.

The operation is as follows: To introduce the link into the cuff, the locking-plate F is moved to the left, as shown in Fig. 2, which exposes the open hook K. (See Fig. 2.) The link is then passed endwise through the buttonholes in the cuff and the second or loose button is hooked into the hook and the locking-plate F is then slid to the right into the position shown in Fig. 1, whereupon the projection G moves out into the opening I and prevents the locking-plate from sliding too far to the right or its return to the left, and also when in its right-hand position, as shown in Fig. 1, the spring E moves outwardly, being relieved from the confining action of the locking-plate and impinging against the left-hand edge of the locking-plate, which prevents it from moving back again unless considerable pressure is applied to it. In this way the buttons are securely locked to the link and escape

of either of them is prevented until the locking-plate is again moved to the left, whereupon the spring E is depressed and the hook K is again opened. The loose button can then
5 be removed and afterward the other button, with the link attached thereto, can in turn be freed from the cuff.

In Figs. 4 and 5, I show substantially the same construction with the exception that
10 I form the means for confining the locking-plate in its locked position upon the outer edge of the link adjacent to the opening therein, as follows: The link C is or may be made of wire and is provided with the same
15 hook-like part K, as shown in the other figures, and has substantially the slide F; but at the end of the link L, opposite the hook K, I form an outwardly-projecting part, which is nothing but a bend in the metal. This bend
20 when the slide F is in position enters an opening I, which is the same in function as the opening I in the slide shown in Figs. 1, 2, and 3. It is obvious that the locking effect upon the slide is substantially, not to say identically, the same as that in the other case.

In Fig. 4 are shown two little projecting ear-like parts M M. These I ordinarily leave projecting laterally when the openings are made in the sleeve, because they are of
30 service during the sliding of the sleeve, acting as resistance against the ends of the finger and thumb. The operation of this form is substantially the same as the one first described. The engagement of the projection
35 at L upon the link C, with the hole or opening I in the sliding sleeve, holds the sleeve against backward movement.

In Figs. 7, 8, and 9 I show a modification of the form shown in Figs. 4 and 5. In the last-named construction the wear of the left-hand
40 button upon the link reduces, after considerable lapse of time, the thickness of the metal at the bend. Consequently the stiffness of the spring is reduced and in course of time
45 results in there being insufficient elasticity to properly engage the projections L with the hole or opening I. Consequently I prefer to make this form of my invention as shown in Figs. 7, 8, and 9—that is to say, I deflect the
50 metal composing the link from the ordinary link form and produce the bends N N in the middle, which abut against one another.

In Fig. 9 the bend is made all upon one side of the link and it abuts against the other side of the link, which is left straight. In this way
55 the spring portion of the link is that part which is between the bend N and the outwardly-projecting end, where the projection L is made. This preserves the spring-tension uniform permanently.

In Fig. 6 I show a modification of the form shown in Figs. 1 and 2—that is to say, instead of cutting the spring E from the plate-like part D, I cut it from the sliding sleeve. In
60 this figure the plate is lettered F. The link C and the spring is shown at O, it being cut out from the upper central portion of the front side of the sliding sleeve, and it locks over the front edge of the plate D or enters a
65 recess therein, and, as will be obvious, serves the same purpose that the spring E does in Figs. 1 and 2.

I do not limit myself to the details of construction shown, since it will be quite obvious to those who are familiar with this art
75 that modifications may be made therein and still the essentials of my invention be employed.

I claim—

1. The combination, in sleeve-links, of two
80 buttons provided with eyes, an elastic metallic link open at one side to produce a hook, a sleeve adapted to slide upon the link to close the opening, and lateral projections upon the link adapted to engage with the sleeve to hold
85 it in position, substantially as set forth.

2. The combination, in sleeve-links, of two buttons, each provided with an eye, an elastic metallic link open at one side to produce
90 a hook and provided with a lateral projection upon the free end which is opposite the hook, said link being bent so that its two sides abut against each other, and a sleeve adapted to slide upon the link and provided with an opening
95 adapted to receive the said projection upon the link, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 8th day of June, A. D. 1892.

THOMAS W. F. SMITTEN.

Witnesses:

PHILLIPS ABBOTT,
J. E. HOFFMAN.