## G. H. FOX.

## BUTTON FASTENER.

No. 395,745.

Patented Jan. 8, 1889.

FIG.1.

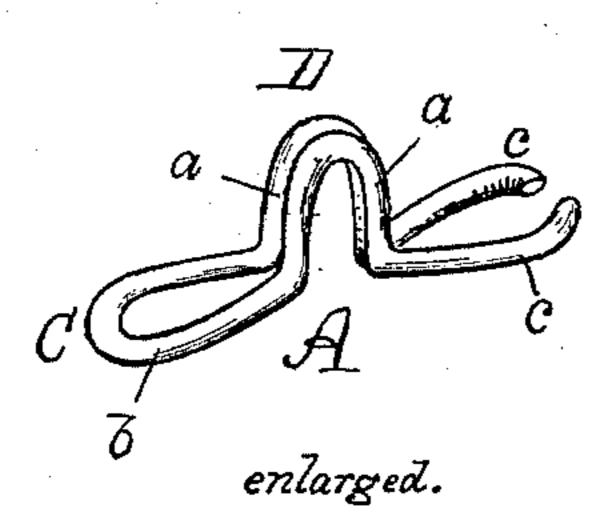
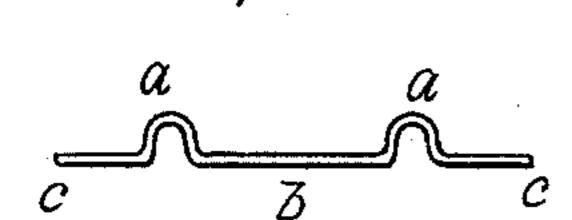
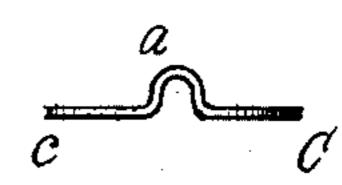


FIG. 6



Fra. 3.



 $\begin{array}{c}
c \\
B \\
C
\end{array}$ 

FIG. 2.

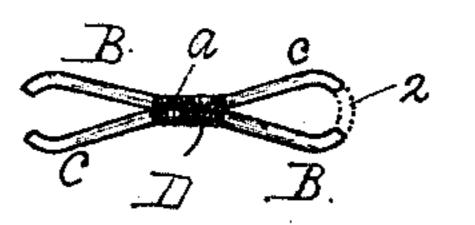


FIG. 5.

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FIG.4.

Witnesses.

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GEORGE H. FOX, OF BOSTON, MASSACHUSETTS.

## BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 395,745, dated January 8, 1889.

Application filed May 21, 1888. Serial No. 274,520. (No model.)

To all whom it may concern:

Be it known that I, George H. Fox, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massa-5 chusetts, have invented certain new and useful Improvements in Removable Button-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to button-fasteners, particularly that class which are adapted to be removably employed in securing a button to an article without the aid of a "setting-implement," so termed. The fastener is preferably to be used in connection with buttons pro-

vided with shank-eyes.

The object of this invention is to make a cheap fastener, and this is the primary object in constructing the fastener as a dual one.

25 In this way a metallic blank may be used of very small cross-section, while the requisite strength is provided at the point needed—viz., the loop which is adapted to engage the shank-eye of the button.

The drawings represent, in Figure 1, a perspective view, Fig. 2 a plan, and Fig. 3 a side elevation, of a button-fastener embodying my invention. Fig. 4 represents the fastener in engagement with a button. Fig. 5 is a modified form of construction. Fig. 6 represents the blank before being bent upon itself.

The object of my invention is to construct a button-fastener which may be made of wire or from a metallic blank of very small area in cross-section. To accomplish this result this fastener A is to be made dual or of two parts, B B, preferably from a continuous wire or metallic blank circular or otherwise in cross-section. Said blank is first cut of the requisite length, and then two loops, a a, are struck up therefrom. The latter are so located in the blank that the portion b between said loops, when completed, is about twice the length of the unbent extremities c c of the blank beyond the loops, or thereabout. After said loops are formed, the blank is bent midway

upon itself, and by this act of bending, a loop, C, is created from the portion b of the blank. Said loop is contracted at its junction with the loops a a, since the latter are contiguous, 55 and forms a base or support on one side of the loops a a, which now lie in a plane at right angles to that assumed by said loop C. Cooperating therewith upon the opposite sides of said loops a a are the legs or extremities c 60 c of the blank, which are so bent as to diverge from each other, but are located in the same plane with the loop C, before mentioned. In this manner the button-fastener is dual at the point where strength is required—viz., at the 65 loop D—which serves to engage the shankeye d of the button E, and is composed of the loops a a in alignment with and contiguous one to the other. Moreover, this loop D is steadied, and the device as an entirety rests 70 upon the material by means of the loop C on one side and the divergent legs upon the other, which together serve as a base or support to prevent the button-fastener from pulling through the fabric. Furthermore, the en-75 larged end of the loop C and the divergent legs c c effectually prevent disengagement or unlocking of the fastener and button. In the act of attaching a button the eye of the latter is pushed through a hole previously cut in the 80 fabric, the divergent ends are brought together and inserted through the shank-eye dof the button, which latter is slipped along until properly positioned upon the loop D. Said extremities are then released and assume 85 their normal divergent position caused by the inherent elasticity of the metal composing the blank. Thus the button is securely locked upon the fastener, and no accidental disengagement is possible.

This button-fastener is very cheaply made, simple in form, and can be constructed of very thin material, which permits it to fit more closely to the fabric. The ends of the legs c c may be turned up slightly to engage 95 in the material when the fastener is in use.

In Fig. 5 I have shown a fastener, A, of two parts, B B, identical in construction and shape with the loops a a, aligned and arranged in parallelism contiguous to each other; the 100 legs c c are divergent at both ends, while the parts B B are finally united, as shown in said

figure by the broken line 2, which represents a metallic connection to complete a fastener, A, as an entirety. Furthermore, to present a more finished appearance the extremities are bent toward each other, as shown in Figs. 1, 2, and 5. By thus curving them inwardly the ends of the legs cc are prevented from catching on material brought in contact with them.

What I desire to claim is—

A button-fastener consisting of the open eye D, formed by the dual loops a a and the loop

C, co-operating with the legs cc, divergent and lying in the same plane with said loop at right angles to the plane of said dual loops aa, substantially as and for purposes specified.

In testimony whereof I affix my signature

in presence of two witnesses.

GEO. H. FOX.

Witnesses:

H. E. LODGE. FRANCIS C. STANWOOD.