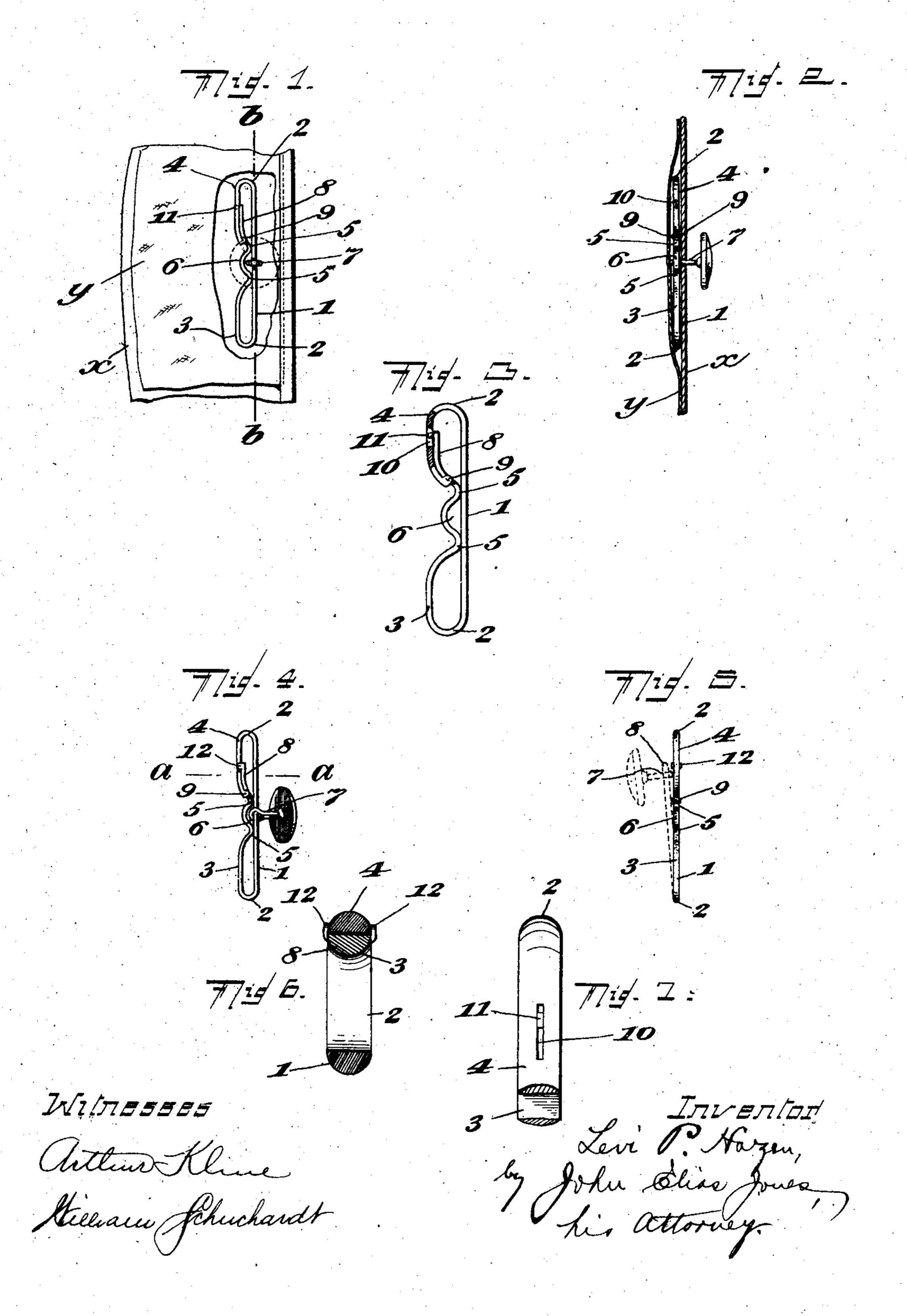
L. P. HAZEN. BUTTON FASTENER. APPLICATION FILED MAR. 16, 1905.



UNITED STATES PATENT OFFICE.

LEVI P. HAZEN, OF CINCINNATI, OHIO.

BUTTON-FASTENER.

No. 834,802.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Levi P. Hazen, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Button-Fasteners, of which the following is a specification.

specification.

This invention relates to certain improvements in fasteners for buttons and the like, and more particularly in that class of such devices which are especially designed for use in holding buttons attached to garments; and the object of the invention is to provide a device of this character of a simple and inexpensive construction and of a compact, strong, and durable nature which shall afford a simple and effective means for securely holding the buttons in position upon a garment, while being at the same time capable of ready operation either for the attachment or removal of the buttons when desired.

The invention consists in certain novel features of the construction, combination, and arrangement of the several parts of the improved button-fastener whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be

carefully defined in the claim.

In the accompanying drawings, which serve to illustrate my invention, Figure 1 is a 35 broken view showing a fragmentary portion of the inside of a garment having a buttonfastener constructed according to my invention applied thereto for use. Fig. 2 is a sectional view taken through the garment frag-4¢ ment in the plane indicated by line b b in Fig. 1. Fig. 3 is an enlarged face view, partly in section, and showing the improved buttonfastener. Fig. 4 is a perspective view showing a modified form of the button-fastener 45 embodying my invention, together with a button held thereby. Fig. 5 is an edge view of the fastener shown in Fig. 4 and showing in dotted lines one of the members of the fastener drawn sidewise to permit detachment of the 50 button therefrom. Fig. 6 is an enlarged sectional view taken transversely through the locking members of the fastener shown in Fig. 4, the plane of the section being indicated by the line a a in Fig. 4. Fig. 7 is a fragmen-55 tary edge view of the upper part of the fastener shown in Figs. 1 to 3 and illustrating the construction and arrangement of the engaging parts of the locking devices for holding the members in relation.

Referring first to Figs. 1 to 3, the improved 60 button - fastener is preferably constructed from an elongated metal strip or wire of proper strength and elasticity, and said wire will, by preference, be either half-round in cross-section or flattened at its end portions 65 to permit those parts of the members of the fastener which are designed for locking engagement to fit flush upon each other.

The metal wire or strip is bent to produce a central straight body portion 1, extended 70 lengthwise along one side of the fastener and having at its ends the bights or bends 22, by means of which the interlocking members 3 and 4 of the fastener are integrally connected with said body portion, said members 3 and 4 75 being extended in a general direction parallel with the body portion 1, but separated therefrom by a distance to permit the eye or ring of the button to be engaged between said body portion and one or the other of the in-80 terlocking members, as will be hereinafter explained.

The lower member 3, as the parts are shown on the drawings, is of greater length than the upper member 4, and said lower 85 member has abrupt bends or angles 5 5 produced in it and directed toward the body portion 1 and across the intervening space between member 4 and said body portion, forming a W-shape or scalloped bend, and 90 the convex extremities of said sharp bends or projections 5 5 being in substantial contact with the body portion. The bends of projections 5 5 are spaced apart from each other to produce between them a space or mousing 95 6, in which is adapted to be received the ring or eye of the button, (indicated at 7 on the drawings,) the elasticity of the metal of which the device is formed being sufficient to retain said ring or eye of the button inside 100 said space or mousing 6 by the resistance offered by the projections 5 5 against movement of the ring or eye lengthwise of the body portion past said projections.

The upper end of member 3 above the 105 projections 5 5 is extended away from the body portion 1 and is in substantial alinement with the lower end of said member 3 below projections 5 5, and said upper end portion 8 of member 3 is adapted to be held 110 securely between the forked end formed by the spaced lugs or projections 9 9, produced

upon opposite sides of the lower extremity of the upper member 4 of the device, the said lower extremity of the upper member being bent over toward the body portion 1, as seen in Figs. 1 and 3, to permit secure engagement of the lugs 9 9 at opposite sides of the outwardly-bent upper portion 8 of the lower member.

Upon the upper extremity 8 of the lower member of the fastener is produced an outward projection or locking-pin 11, which when said portion 8 is engaged between the lugs 9 is adapted to be engaged in a slotted opening 10, extended lengthwise in the members of the reciprocal engagement of the parts being such as to securely hold the members of the fastener from sidewise movement, whereby the ring or eye of the button is prevented from being accidentally dislodged from the space or mousing 6, provided to receive it.

It will be readily seen, however, that when the engaging portions of members 3 and 4 are sprung away from each other to disengage pin 11 from opening 10 and to similarly disengage the portion 8 of member 3 from between lugs 9 9 the lower member 3 may be moved sidewise, as indicated in dotted lines in Fig. 5, so that the ring or eye of the button 7 may be readily engaged with said member

30 or disengaged therefrom.

The improved button-fastener is of an extremely simple and inexpensive nature and is capable of being made in a very compact form, so that it is especially well adapted for use upon uniform and other garments in which such devices have hitherto been commonly employed for detachably holding the buttons in position. In Figs. 1 and 2 I have illustrated the attachment of the fastener and button held thereby to a fragment of such a garment, x being the outer fabric of the garment and y the lining or facing designed to cover the button-fasteners upon the

inner side of the garment. The flattened form of the garment renders it capable of fit- 45 ting snugly in between the two plies x and y,

as shown in Fig. 2.

It will also be obvious from the above description that the improved fastener is capable of considerable change without material 50 departure from the principles and spirit of the invention. For example, in Figs. 4, 5, and 6 I have illustrated a construction wherein in lieu of a single outwardly-directed pin or projection 11, engaged in a slot 55 in member 4, the upper portion 8 of member 3 has at opposite sides spaced outwardly-directed lugs or projections 12 12, similar to the lugs 9 9 on the member 4, but reversely directed and adapted to receive between them 60 the upper portion of the member 4 to prevent sidewise movement of the members when in locked position.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 65

ent, is—

A button-fastener comprising a straight strip of wire having its opposite ends bent laterally and then toward each other parallel to said straight strip, a W-shape or scalloped 70 bend made in one bent end of the strip and arranged contiguous to the central portion of the latter and having a short raised extension, and a downwardly-turned forked extension provided on the opposite bent end of said 75 strip and adapted to freely engage and suitably interlock with said short extension on the inturned scalloped end of said straight strip.

Signed at Cincinnati, Ohio, this 10th day 80

of March, 1905.

LEVI P. HAZEN.

Witnesses:

John Elias Jones, William Schuchardt.