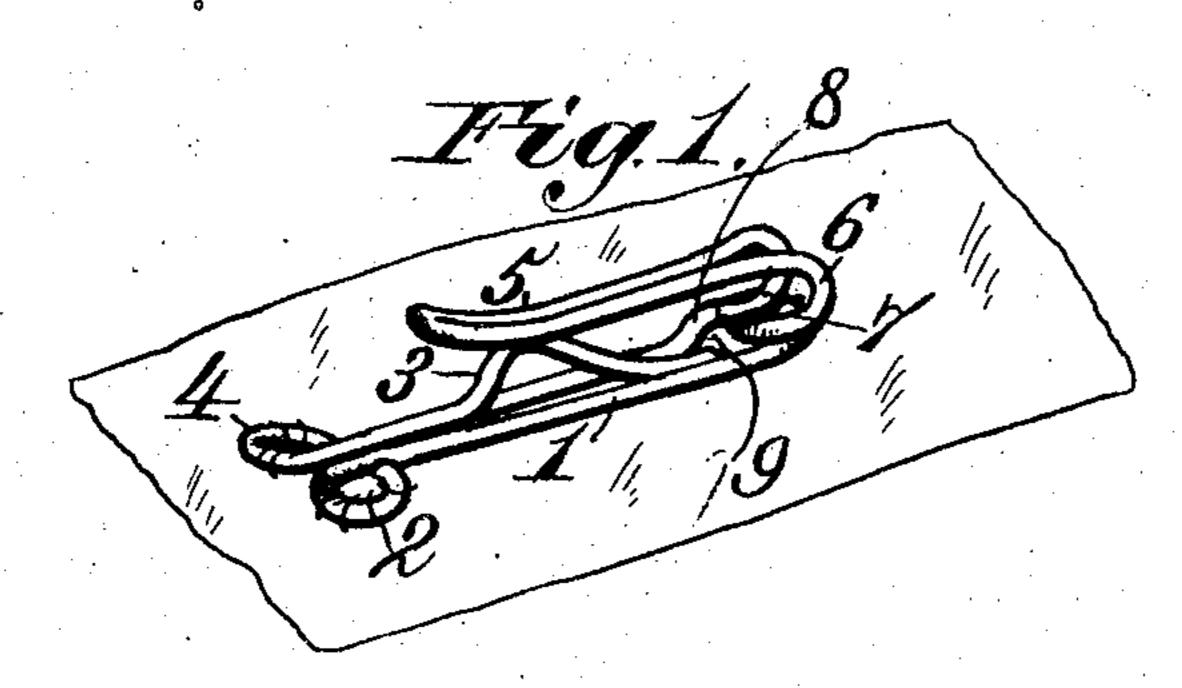
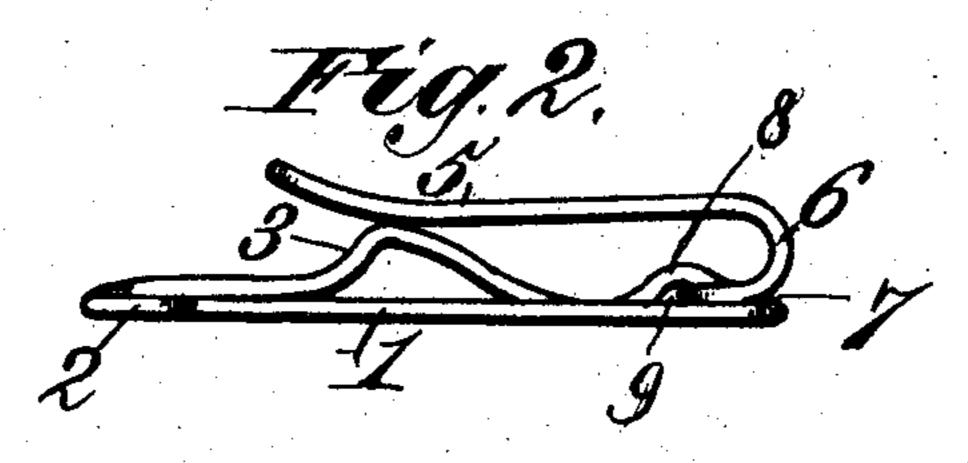
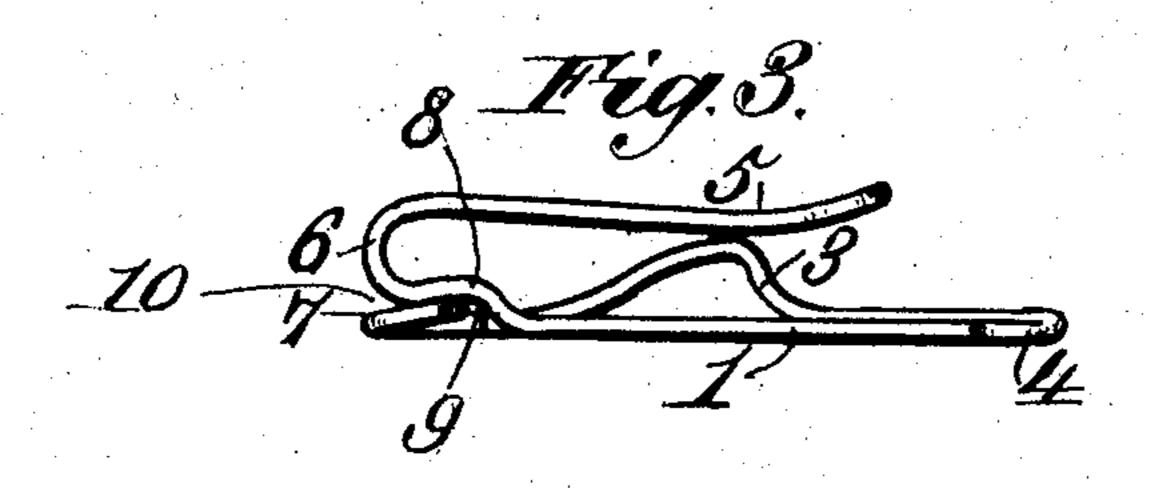
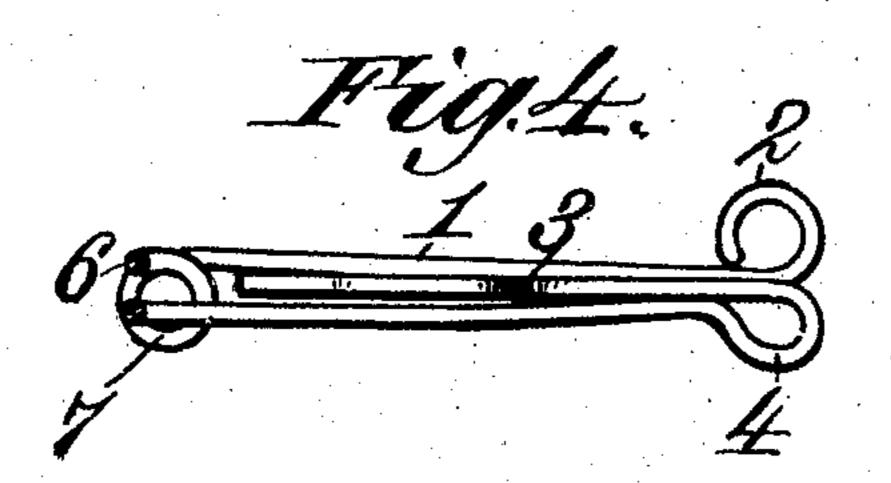
F. E. MILLER.
GARMENT FASTENER.
APPLICATION FILED JULY 27, 1904.









Witnesses. Astert Errett. Mus L. Morrio, S.

Trank E. Miller.
By James & Yorris.
Atty

United States Patent Office.

FRANK E. MILLER, OF PHILADELPHIA, PENNSYLVANIA.

GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 780,897, dated January 24, 1905.

Application filed July 27, 1904. Serial No. 218,409.

To all whom it may concern:

Be it known that I, Frank E. Miller, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Garment-Fasteners, of which the following is a specification.

This invention relates to garment-fasteners of the hook-and-eye type, and particularly to a hook embodying a hump or shoulder extending longitudinally of the shank and cooperating with a bill to retain an eye in connection therewith.

The present form of hook has been devised 15 to overcome numerous disadvantages heretofore present in hook structures and has means whereby the bend of the hook is held securely. to the garment or fabric to which it is sewed and adapted to be applied close to the edge of 20 a garment or with the bend of the bill directly in line with the garment edge or at a distance from such edge. The stitches securing the bend of the hook when the latter is applied are shielded from injury by friction of the 25 coupling-eye during the operations of assembling and disassociating the hook and eye and while the eye is in engagement with the hook. The hook is symmetrical in shape and is devoid of objectionable projections or other 30 structural features, and pulling, tearing, or fraying the most delicate fabric is avoided. Furthermore, the present form of hook can be used with any eye now commonly known in the market, and when the eye and improved 35. hook are assembled the opening fastened thereby will be prevented from gaping. The improved hook is also adapted for use with meeting or overlapping edges of a garment or the edges of two pieces of cloth and is capable of 40 being quickly and firmly applied.

In the drawings, Figure 1 is a perspective view of a hook embodying the features of the invention and shown applied. Fig. 2 is a side elevation of the hook. Fig. 3 is a view similar to Fig. 2 looking toward the opposite side of the hook. Fig. 4 is a top plan view of the hook, showing the bill broken away.

The numeral 1 designates the shank of the hook composed of two members or parts, one of which terminates in a rear eye 2 and the

other rebent and extended longitudinally in central relation to the shank and struck up to form a hump or shoulder 3, the rebend for producing the said hump or shoulder being also shaped to form a second rear securing- 55 eye 4. The free end of the rebent member of the shank extends downward between the two main members of said shank in advance of the hump or shoulder 3 and has free resilient action to accommodate the assemblage 6c and disassociation of the usual eye member with the hook. The hook also has a bill 5 continuous with the shank and projecting rearwardly over the hump or shoulder 3, said bill being struck upwardly at its free end to 65 facilitate the movement of the coupling-eye member into and out of the hook. The bend 6 of the bill at its base includes the essential feature of the invention, which consists of a horizontal securing or thread eye 7, which is 70 continuous with one member of the bend and with one member of the shank, the opposite member of the shank over the eye being upstruck, as at 8, to form a recess 9 to permit the eye 7 to lie flush with the bottom of the 75 shank and also to have the outer portion of the eye in line with the maximum projection of the bend, the shank adjacent to the latter between the shank and the bill being thus provided with a seat-bend. A space 10 is 80 provided between the eye 7 and the under side of the bend of the hook to permit the ready application of securing-stitches to the said eye. The shank and bill are composed of two members provided by doubling or re- 85 bending the material of which the hook is made up, and these members coöperate to render the hook structure effective, and particularly in placing the horizontal securingeye in the manner set forth.

In applying the improved hook it is secured by stitches passed over and through the rear eyes of the shank and the eye 7, and the stitches of the latter eye being below the adjacent shank member will prevent cutting or 95 abrasion thereof by the coupling-eye coöperating with the hook. Furthermore, in view of the position of the eye 7 under the base of the bend of the bill, the hook may be placed close to the edge of the fabric or garment 100

without liability of slipping or becoming loose by continued use, and both temporary and permanent distortions of the bill are prevented and convenience in assemblage and dis-5 connection of the coupling-eye with respect to the hook results. By positioning the eye 7 as set forth injury to the fabric or garment to which the hook is attached is prevented, and, moreover, the continuation of 10 this eye with respect to the shank and bill is advantageous in that when stitches are passed therethrough and connected to the fabric or garmenta more positive attachment will ensue.

The wire used in constructing the hook will 15 be of resilient nature, and it is proposed to accommodate various applications to vary the proportions and dimensions of the hook. Furthermore, in some instances the hook will be plated to resist corrosion; but in the cheaper 20 grades of the hook wire will be used in the construction of the same having non-corroding characteristics.

Having thus fully described the invention,

what is claimed as new is—

1. A hook of the class set forth, having a shank and bill continuing from the latter, and a securing-eye located under the bend between the shank and bill and having its outer maximum projecting portion in vertical alinement 30 with the maximum projection of said bend, a part of the shank being up-struck to provide a recess for the eye.

2. A hook of the class set forth having a shank, a bill, the shank and bill being com-35 posed of cooperating members, and a securing-eye continuous with one member of the | shank with a part thereof up-struck adjacent shank and bill and located under the forward extremity of one member of the shank and the bend between the latter and the bill, said eye 40 having its under portion in a plane coincident with the under portion of the shank and in line with the maximum projection of the bend between the bill and the shank.

3. A hook of the class set forth, having a 45 shank and a bill continuous therewith, the shank having an up-struck portion to form a recess at its forward extremity and provided with a horizontally-disposed securing-eye under the said recess and within the maximum 50 projection of the bend between the shank and the bill, the eye being continuous with a portion of the bend of the bill and located below said bend.

4. A hook of the class set forth, having a seat-recess at the forward extremity of the 55 shank members thereof between the latter and the bend of the bill members of the hook, and a horizontally-disposed eye continuous with one member of the shank and bend of the bill and located in the recess under the bill within 60 the maximum projection of the latter, the outer terminal of the eye being in vertical alinement with the members of the bend.

5. A hook of the class set forth, having a shank and bill continuous therewith, the 65 shank adjacent to the bend between the latter and the bill having a seat-recess formed therein, and a securing-eye continuous with the shank and the bend between the same and the bill, the said eye being horizontally-disposed 70 and located under the said bend in the recess and also terminating within the maximum projection of the bend between the bill and shank, a space being formed between the bend and the eye.

6. A hook of the class set forth, having a shank with a rebent portion struck up to form a hump and a bill continuous with the shank through the medium of an intermediate bend, the bill projecting over the hump, the shank 80 and bill being composed of cooperating members, one member of the shank adjacent to the bend between the same and the bill having an

up-struck portion to provide a seat-bend, and a horizontally-disposed eye located wholly 85 within the seat-bend and under the bend be-

tween the shank and the bill.

7. A hook of the class set forth, having a to and under the bend between the bill and 99 the shank, the shank and bill being composed of cooperating members, and a horizontallydisposed securing-eye continuous with one member of the shank and one member of the bend between the bill and the shank, said eye 95 being located under the up-struck portion and wholly under the bend between the bill and the shank.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 100 nesses.

FRANK E. MILLER.

Witnesses:

GERTIE A. MASON, GEO. D. GIDEON, Jr.