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FASTENER FOR GLOVES AND THE LIKE.
APPLICATION FILED JAN. 23, 1909.

947,808.

Patented Feb. 1, 1910.

Fig 1

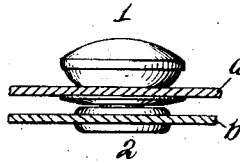


Fig 2

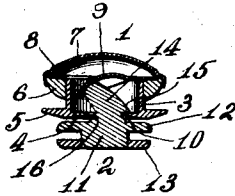


Fig 3

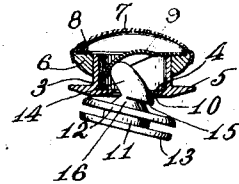


Fig 4

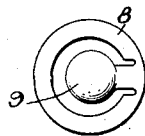
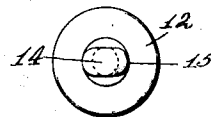


Fig 5



Witnesses

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[Signature]

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UNITED STATES PATENT OFFICE.

JOHN H. FISHER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-THIRD TO BERNARD M. BRIDGET AND ONE-THIRD TO WILLIAM M. MOONEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

FASTENER FOR GLOVES AND THE LIKE.

947,808.

Specification of Letters Patent.

Patented Feb. 1, 1910.

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To all whom it may concern:

Be it known that I, JOHN H. FISHER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Fasteners for Gloves and the Like; 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.

The invention relates to fastening devices for gloves and other articles of apparel and has for its object to provide a simple, durable, cheap and efficient construction of two-part fastener capable of being readily and instantly locked or unlocked to fasten and unfasten the parts of the glove, but which is incapable of being accidentally unlocked after it has been once secured. In practically all of the glove fasteners, as heretofore constructed, the parts go together and are held in engaged relation by spring pressure so that any unusual force such as the quick closing of the hand or sudden twisting movement of the wrist will disengage the parts of the fastener. Some attempts have been made heretofore to produce a fastener to overcome these difficulties, but so far as I am advised, these devices have been too complicated and expensive or, in the alternative, have failed of their intended purpose. Actual experience, under the most exacting conditions, has demonstrated that my improved fastener not only secures the parts together in such relation that they cannot be accidentally displaced, but has further shown that the fastener can be made in such form as to be applied with a minimum of labor and expense to all the uses to which the ordinary spring snap two-part fastener has been heretofore put without in any way modifying the parts of the glove or other article to be fastened.

The invention is illustrated in the accompanying drawings, in which,

Figure 1 is a side elevation of the improved fastener. Fig. 2 is a transverse section through the same with the parts in locked engagement. Fig. 3 is a similar view showing the mode of applying the parts of the fastener in the locking and unlocking operation. Fig. 4 is a plan view of the retain-

ing spring member, and Fig. 5 is a plan view of the stud member.

Referring to the drawings, 1 indicates the eyelet or female member and 2 the stud or male member, both parts being considered as an entirety.

Referring more particularly to the eyelet member, 3 indicates the hollow cylindrical body portion of the eyelet member which is provided at its lower edge with an outwardly extending flange 5 and an inwardly extending flange or rim 4 which latter surrounds a central circular perforation and is preferably beveled or chamfered on its exterior surface inwardly toward the perforation to provide a guiding surface by means of which the stud member may be quickly and accurately inserted in the eyelet member by the simple operation of bringing the parts into juxtaposition. Surrounding the cylindrical portion 3, and secured thereto by any means, as by simply spinning or expanding the cylindrical member 3 therein, is an outwardly extending collar 6 mounted upon which is a cap piece 7 having the edge thereof spun over the periphery of said collar 6 to produce a neat finished appearance. Disposed on the upper face of the collar 6, in a hollow recess therein, is a ring like member 8 provided with an inwardly extending spring tongue 9 having its inner and central portion cupped or dished and having a downward trend or set so as to cause the spring tongue to engage the upper end of the head of the stud member, as will be hereinafter more fully explained. The ring member is preferably held in place on the collar 6 by spinning or crimping the cap piece 7 about its peripheral edge sufficiently to cause it to engage the spring member 9 and hold the same in position with a relatively slight pressure just sufficient to prevent the ring being displaced.

The stud member of the fastener comprises a body portion 11 provided with an intermediate flange 12 and a removable washer 13 about its lower edge, which latter is adapted to be secured to the bottom portion by any appropriate means and to clamp the material of the glove or other article between its inner surface and the adjacent surface of flange 12. Above the flange 12 the body portion of the stud is provided

with a tapered neck 16 from which extends a laterally inclined head 14 which is substantially elliptical in cross section and terminates in a rounded end or nose which is adapted to engage with the dished under face of the retaining spring 9 in the eyelet member. One side of the laterally inclined head 14 projects beyond the neck portion and forms a shoulder 15 adapted to take over and engage the inner surface of the flange 4 about the central opening in the eyelet member. The opposite side of the head, with respect to the shoulder 15, merges into the conical neck 16 and forms therewith a reëntrant angle which receives the flange 4 of the eyelet member and permits the head of the stud member to pass through the opening in the eyelet member in the operation of engaging and disengaging the two members of the fastening device.

In applying the improved fastener to a glove or other article, comprising parts to be secured together, the eyelet member is attached to one part of the glove as *a*, by passing the cylindrical neck portion 3 through a perforation in the material of the glove and then securing the collar 6 with its attached cap piece 7 and spring 9 to said collar 3, by spinning or otherwise expanding the neck 3 within the collar 6, whereby the eyelet member is securely attached to one side of the glove. The stud member is attached to the other portion of the glove or other article by passing the lower end of the body portion 11 through an opening in the material of the glove and clamping the latter firmly in position by means of the washer 13 which is fitted over the end of the body portion 11, as will be understood.

After the two members of the fastener have been attached to the glove or other article, in proper relation, the method of engaging and disengaging the stud and eyelet members with each other will be apparent from an inspection of Fig. 3 of the drawings, and the peculiar coöperation of the parts of the respective members in holding the parts in locked relation and preventing accidental displacement of the same will be apparent from an inspection of Fig. 2. For example, when it is desired to fasten the two flaps or sides of a glove, it is only necessary to bring the end of the head 14, of the stud member, against the lower flange of the eyelet member and press the eyelet member downwardly. By reason of the inclination of the lower surface of the flange 4 adjacent the central opening in the eyelet member, the end of the head 14 of the stud member will be accurately and quickly guided into the said opening without further attention. Continued pressure on the cap of the eyelet member causes the head 14 to pass into the eyelet member until the nose of the head engages the dished under surface

of spring member 9, lifting the said spring against its normal downward set until the head 14 has passed entirely through the opening in the bottom of the eyelet member, after which the set of spring 9 forces the stud member in the direction of the axis of the latter and laterally until the shoulder 15 engages and is locked against the inner surface of flange 4, as shown more particularly in Fig. 2. It will thus be seen that the head is locked securely between the spring 9 and the shoulder 14 of the eyelet member and can only be released by pressing the two members of the fastener together and sliding them laterally a distance to cause the shoulder 15 to pass out of engagement with the flange 4, which can only be effected by causing the head 14 to move spring 9 upward and out of its normal position. When the parts have been moved to this relative adjustment, a slight upward twist of the eyelet member 1 will completely free the shoulder 15 from flange 4 and the head 14 will assume the position shown in Fig. 3 and permit the two parts of the fastener to be separated.

It will be noted from Figs. 2 and 3 that the spring 9 is located in a plane perpendicular to the axis of the inclined head 14 when the parts are in normal position, when the fastener is closed. It is apparent that when the parts are in this position, the lateral pressure of the head will force the spring upward so that the head may be released, as hereinbefore indicated, but when the socket member and stud member are turned relatively to each other the relative positions of the head and spring will be changed in such a way that the head will act transversely on the spring instead of longitudinally thereof, whereby the upward movement of the spring and the disengagement of the head are prevented. This arrangement therefore provides for the easy unlocking of the fastener when the parts are in a predetermined position but makes it impossible for the device to become unfastened when there is any angular turning of the parts such as is bound to occur when the wrist of the user is flexed. The mere tensioning or flexing of the wrist is usually sufficient to open the ordinary glove fastener, but by this invention the turning movement of the parts of the fastener occasioned by the flexure of the wrist causes said parts of the fastener to assume a locked position from which they cannot be disengaged. However, the fastener may be easily manipulated to unlock the same when the socket and head members are in the normal position indicated above.

What I claim is:—

1. In a fastener for gloves or the like, the combination with an eyelet member having a circular bottom opening, a flat flange

entirely surrounding the same, and a downwardly tending spring above the opening; of a stud member having a laterally inclined head adapted to pass through said opening and engage the spring in the eyelet member, and a shoulder below the inclined head which catches over said flange and is held in engagement therewith by said spring.

2. In a fastener for gloves or the like, the combination with an eyelet member having a circular bottom opening, a flange adjacent thereto, and a centrally disposed downwardly tending spring tongue above the said opening and provided with a cup-shaped end; of a stud member having a laterally inclined head adapted to pass through the opening and engage the cup-shaped end of the spring tongue, and a shoulder at the bottom of the inclined head to engage the flange at one side of the opening.

3. In a fastener for gloves and the like, the combination with an eyelet member comprising a base portion having inwardly and outwardly extending flanges and a circular opening, the inner flange being beveled toward the opening, a cap section secured to the base, a ring having a centrally disposed downwardly tending spring tongue held between the cap and base; of a stud member having a laterally inclined head adapted to pass through the opening and engage the spring tongue, and a shoulder at the bottom of the inclined head to engage the flange at one side of the opening.

4. In a glove fastener, the combination of a socket member having an inwardly directed flange at the bottom, a stud member provided with a head that is inclined in lateral and upward direction with respect to the body portion thereof, said head having a flange-engaging shoulder at one

side, and a spring tongue within said socket member which is normally disposed in a plane perpendicular to the axis of said inclined head and engages the extremity of said head to hold the shoulder seated on the flange.

5. In a glove fastener, the combination of an eyelet member comprising a substantially cylindrical body portion having a circular bottom opening and a flat inwardly directed flange entirely surrounding the same, a spring tongue within the eyelet member inclined downward from the upper portion thereof and having a cupped or dished free end, and a stud member having a head with a lateral and upward inclination with respect to the body portion of said stud, said head having a shoulder at one side which rests on the flange of the eyelet member when the stud member enters the latter, the upper extremity of said head being engaged by the cupped end of said spring.

6. In a glove fastener, the combination of an eyelet member having a substantially cylindrical body, and an inwardly directed flange at the bottom defining a circular opening, a stud member having a head inclined laterally and upwardly with respect to the body portion thereof, said head being connected with said body portion by means of a neck forming a reëntrant angle with the head at one side and a flange engaging shoulder at the opposite side, and a spring within the eyelet member to press the head laterally and thereby hold the shoulder against the flange.

In testimony whereof I affix my signature, in presence of two witnesses.

JOHN H. FISHER.

Witnesses:

ARTHUR L. BRYANT,
CHAS. J. O'NEILL.