

No. 825,391.

PATENTED JULY 10, 1906.

M. C. HORTON.
SAFETY HOOK.

APPLICATION FILED NOV. 23, 1905.

FIG. 4.

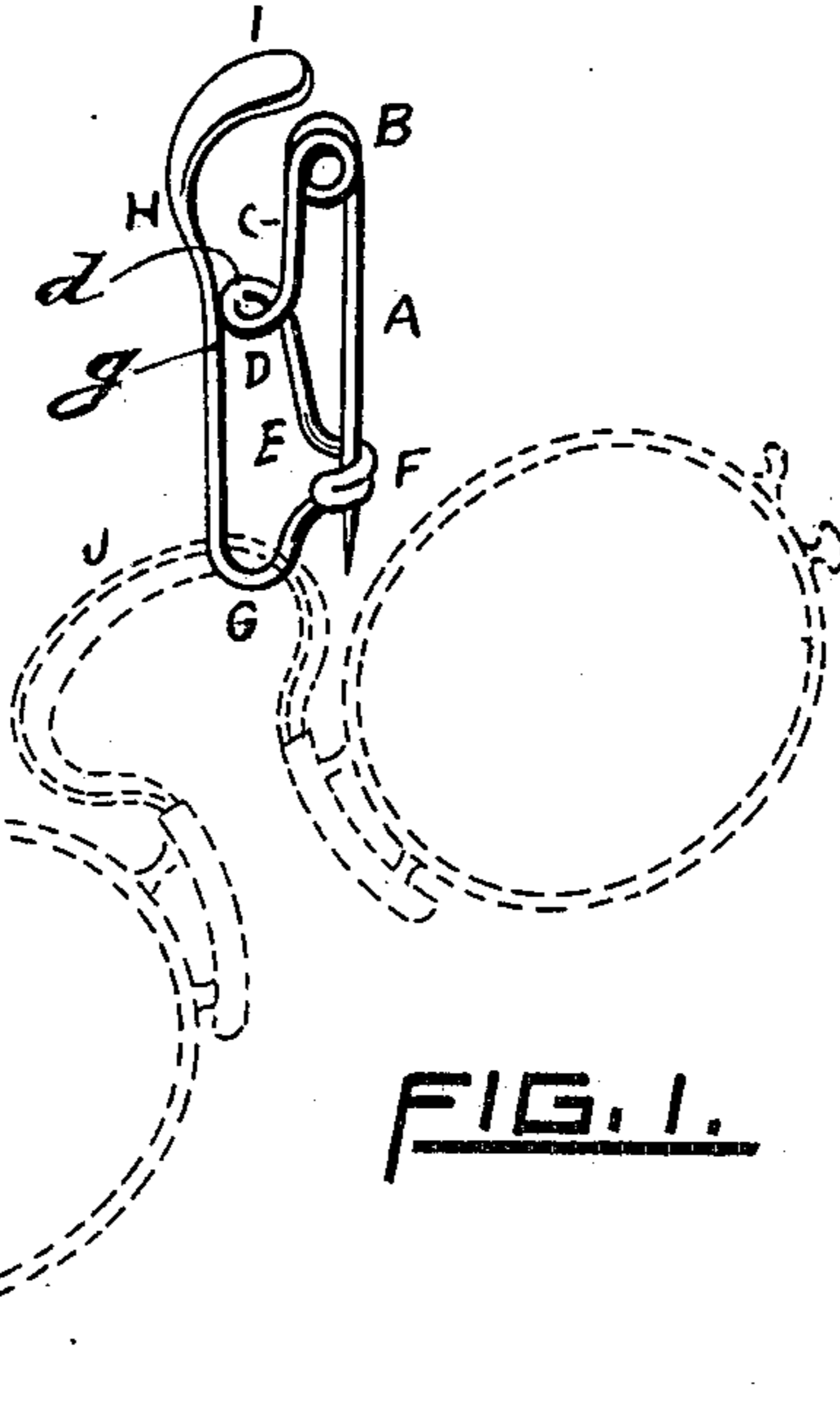
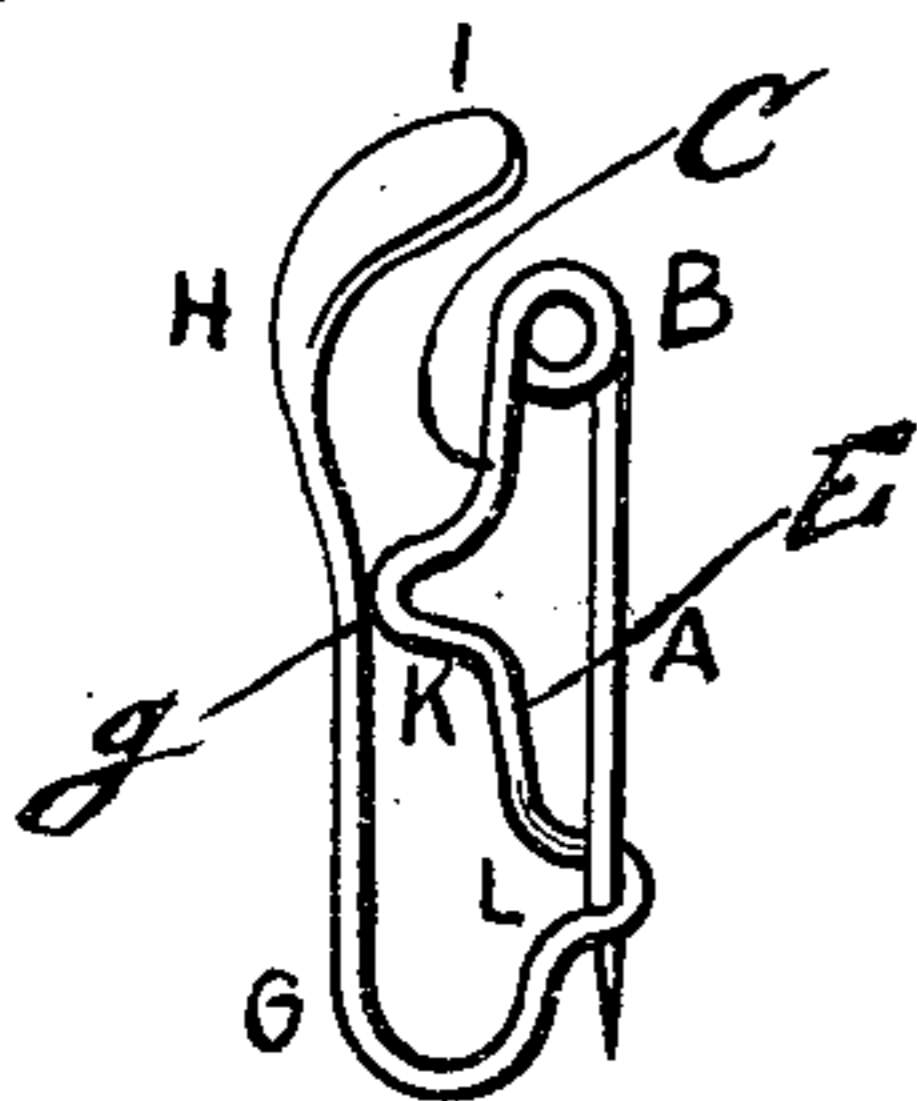


FIG. 1.

FIG. 3.

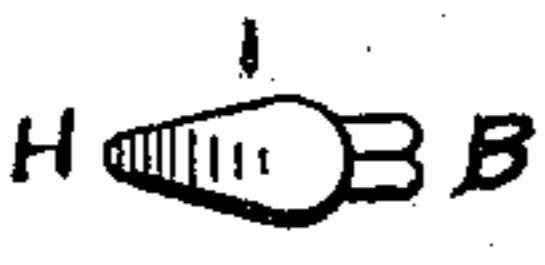
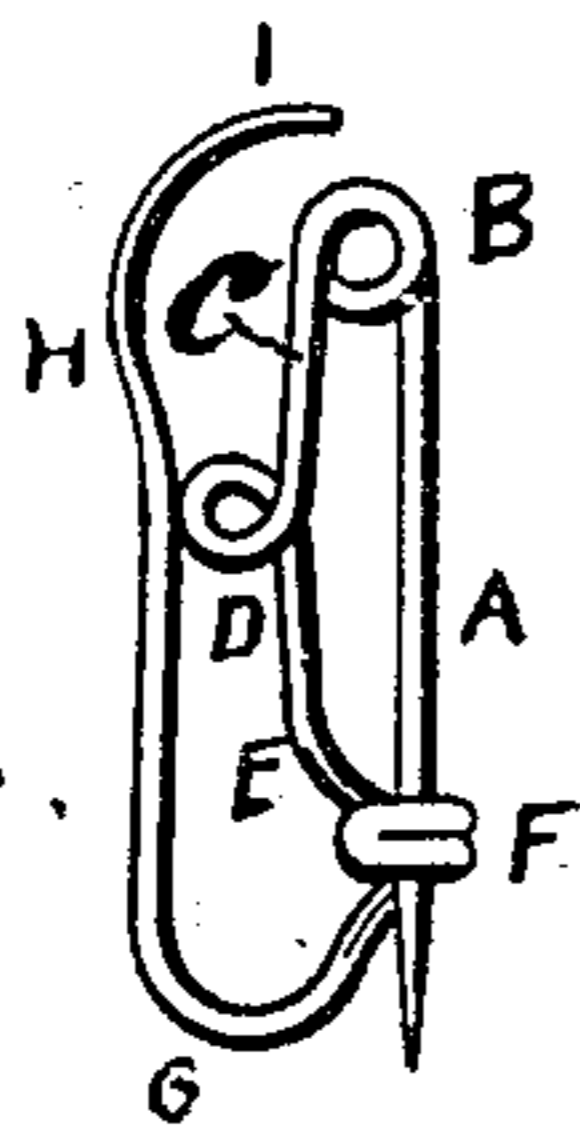


FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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SAFETY-HOOK.

No. 825,391.

Specification of Letters Patent.

Patented July 10, 1906.

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To all whom it may concern:

Be it known that I, MARY C. HORTON, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Safety-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings.

Like reference-letters indicate like parts.

Figure 1 is a perspective view of my improved safety-hook with a pair of eyeglasses suspended thereon, the latter being shown in dotted lines. Fig. 2 is a side elevation of said hook. Fig. 3 is a top view of the same. Fig. 4 is a perspective view of a modified form of said hook embodying the same mechanical principle.

My invention relates to safety-hooks, and is especially adapted for supporting eyeglasses or other articles of personal wear.

It consists of the novel and useful construction and combination of the several portions of the device, as hereinafter described, and specifically set forth in the claims.

My improved safety-hook is made of a single piece of tempered metal bent in the peculiar shape illustrated in the drawings.

A represents the pin-tongue of the device, by means of which it is fastened to the garment, the free end of the pin-tongue being sharp to adapt it as a thrusting-point to enter and pass through the fabric. At the opposite end of the pin-tongue A are the integral double spring-coils B. As shown in Figs. 1 and 2, the wire passes from its coiled portions B to form a straight portion C, extending substantially parallel to the pin-tongue A when the latter is in its engaged or locked position. The portion C terminates in a complete loop D, whose convex bend *d* extends in a direction substantially at a right angle with the pin-tongue. Beyond said loop D the wire passes straight, but at a less angle, as shown at E, toward the pin-tongue A and then is formed into a U-shaped bend F, which constitutes a pin-catch for the engagement of the free end of the pin-tongue A. From the pin-catch F the wire is formed into a large U-shaped bend G, the longer portion of which extends substantially parallel with the pin-tongue and passes in contact at its upper end or bend *g* with or in close proximity to the convex bend *d* of the loop D. Above said point of contact or proximity the wire is curved in a long inwardly-directed

curved terminal H, whose free end is broadened, preferably in the spatulate shape shown at I, which extends slightly beyond and partially over the coils B. This terminal H is continuous with the hook portion G, but is preferably bent on a radius larger than that of the hook portion G. Said parts G and H comprise two outwardly-directed curved portions extending *seriatim* with the intermediate inwardly-directed bend *g*, the outer side of said parts G and H being convex and the inner side thereof being concave. The device thus comprises the three groups or portions, all, however, integral, the pin-tongue A and spring-coils B constituting the fastening means, the portions C and E, with the intermediate loop D, constituting the body, and the bends G and H constituting suspending means for holding the eyeglasses or other article.

The use of this device is as follows: It is fastened upon the garment by means of the pin-tongue A, with the pointed end directed downward and held in position by the engagement of the pin-tongue with the pin-catch F. A person wearing this safety-hook and desiring to suspend eyeglasses thereon first passes the bow-spring J of the pair of eyeglasses downward between the end I of the terminal curve H and the coils B. The spring J is easily passed down between the outer bend *d* of the loop D and the inner portion of the bend *g*, and then rests upon the upper inner surface of the bend G, as illustrated in Fig. 1. To detach the pair of eyeglasses from the safety-hook requires only a one-hand movement. The bow-spring J is easily passed up between the outer bend *d* of the loop D and the inner surface of the bend *g* and thence out between the coils B and the end I of the terminal curve H and is thus wholly disengaged from the hook. There are two features of this construction, which constitute the safety device, to prevent accidental displacement or removal of the eyeglasses from the hook. The first of these is the outwardly-extending loop D, which normally is in contact with or close proximity to the contiguous upwardly-directed member of the bend G. The bow-spring J cannot readily be passed by the loop D without a peculiar hand-given movement of the eyeglasses and such a movement as cannot be accidentally caused. If the person is bending, stooping, or lying, the bow-spring J may of course move up along the bend G, or it may

be accidentally thrown upward; but its broad outer surface, and not its thin edge, will come into forcible contact with the lower convex surface of the loop D, and so the bow-spring J is confined in its movements wholly to the space between the portions D, E, and G. If, however, by any unusual force and accidental combination of circumstances the bow-spring J is passed up over the loop D, the second safety device consists of the curved portion H, which serves as a secondary hook. This while the person is in any other than a perpendicular position retains the bow-spring J in the terminal bend H of the device if by any means the bow J gets above the loop D, and while in that position the bow-spring cannot be detached without being brought upwardly and inwardly toward the garment sufficiently to pass up and around the end I of the hook H and cannot be separated from the hook H until such movement has been fully accomplished.

The modified form of the device shown in Fig. 4 differs from that shown in Figs. 1 and 2 in two respects. Instead of the full loop D, as in Figs. 1 and 2, there is a U-shaped bend K, whose convex end is in contact with or in close proximity to the adjacent inner surface of the bend g, and instead of a close U-shaped bend F for a pin-catch, as in Figs. 1 and 2, there is a wide U-shaped bend L, in which the pin-tongue A is engaged. The method of use and the advantages are the same as already explained, and it is evident that the same mechanical principle is found in both said constructions.

It is evident that my improved fastening

device is adapted to attach a watch or other article to the dress or apparel.

I claim as a novel and useful invention and desire to secure by Letters Patent—

1. The improved safety-hook herein described, consisting of a single piece of tempered metal and comprising a pin-tongue and a double spring-coil, a body portion extending substantially parallel to the pin-tongue and provided with an intermediate outwardly-projecting closed loop and also with a pin-catch, a U-shaped bend whose inner upper end is in contact with or in close proximity to said loop, and a curved terminal bend continuous with the first-named bend and having its outer end curved inwardly into proximity with said spring-coils.

2. The improved safety-hook herein described, consisting of a single piece of tempered metal and comprising a pin-tongue and a double spring-coil; a body portion extending substantially parallel to the pin-tongue and provided with an intermediate outwardly-extending bend and also with a pin-catch, a U-shaped bend whose inner upper end is in contact with or in close proximity to said bend, and a curved terminal bend continuous with the first-named bend but curved on a larger radius than the first-named bend and having its outer end bent inwardly into proximity with said spring-coils.

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

MARY C. HORTON.

Witnesses:

SAML. P. COOK,
CHAS. H. HORTON.