

S. W. REYNOLDS.
SAFETY SNAP HOOK.
APPLICATION FILED NOV. 18, 1911.

1,040,415.

Patented Oct. 8, 1912.

Fig. 1.

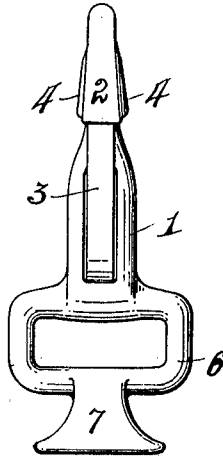


Fig. 2.

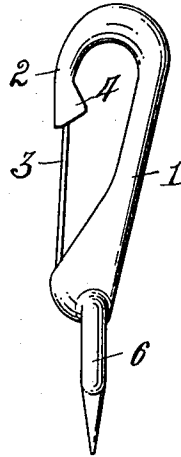


Fig. 3.

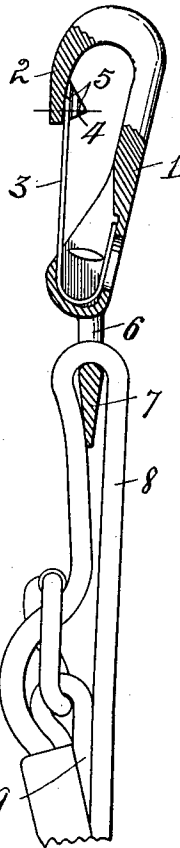
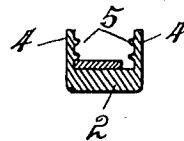


Fig. 4.



WITNESSES:

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SAFETY SNAP-HOOK.

1,040,415.

Specification of Letters Patent.

Patented Oct. 8, 1912.

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To all whom it may concern:

Be it known that I, SAMUEL W. REYNOLDS, a citizen of the United States, and a resident of West Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Safety Snap-Hook; 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 the figures of reference marked thereon, which form a part of this specification.

My invention relates to snap-hooks, and has for its object the provision, in a hook of this character, of simple and efficient means for preventing an accidental disengagement therefrom of an eye, ring or other article should the spring tongue become weakened, or for any cause stand with its free end slightly spaced from the bill or terminal of the hook, as is frequently the case, and also serving to prevent an opening movement of the tongue when sprung sidewise from its normal seating position by a quick jerk or pull thereon.

The invention is fully described in the following specification and a preferred embodiment thereof illustrated in the accompanying drawings, in which,—

Figures 1 and 2 are different side views of a snap-hook embodying the features of my invention. Fig. 3 is a side view of the hook attached to a billet with portions broken away, and Fig. 4 is an enlarged cross-section on the line x, x in Fig. 3.

Referring to the drawings, 1 designates the hook proper, 2 the bill or hook-terminal thereof, and 3 the spring-guard tongue customarily employed in snap-hooks of this class, which has one end fixed to the hook body and its other end portion intended to normally bear outwardly against the inner side of the bill 2, as shown. With snap-hooks of this class considerable difficulty is encountered by reason of the spring tongue becoming weakened and dropping out of normal contact with the bill, thus rendering it easy for the ring or other article held by the hook to work between the guard and bill and disengage itself from the hook. To obviate this difficulty I provide the bill 2 of the hook at opposite sides of the point of contact or intended contact of the tongue 3 therewith, with inwardly projecting spurs

or lugs 4, which guard the free end of the tongue, and are preferably tapered to a point, or substantially so, to tend to direct a contacting article toward the shank or opposite side of the hook. It is apparent with this form of hook that the tongue end must drop or be swung away from the bill to an extent at least equal to the depth of the lugs 4 before it will be possible to force an engaged article between the bill and tongue ends. In order to prevent an opening or inward springing movement of the mousing or tongue 3 when a slightly lateral and inward pull is exerted thereon the inner sides of the lugs 4 are provided with one or more inwardly projecting ribs 5, disposed in substantially longitudinal alinement with the tongue, with which the side edges of the free end portion of the tongue may engage to lock it against an opening movement when shifted laterally from central or neutral position, as indicated in Fig. 4. This feature of my invention is found to be quite important in practice, as a pull which is usually exerted sidewise upon the tongue 3, and which very frequently opens the spring sufficiently to release the engaged article, is prevented from displacing the spring from seated position and only tends to firmly lock the spring against opening. This therefore provides means which is operable by a lateral pull upon the tongue to prevent an opening thereof, and which when the spring is in normal or neutral position does not interfere with its opening movements.

A further feature of my invention consists in providing the looped or inner end of the hook with a tongue 7 projecting outwardly therefrom in substantially longitudinal alinement with the direction of pull of an article in engagement with the hook. The loop 6 is intended to receive the customary billet 8 by means of which the hook is fastened to a strap 9 and the tongue 7 projects within the looped portion of the billet, as best indicated in Fig. 3. Without the provision of the tongue 7 the hook, being pivotally carried by the billet, is permitted to swing freely relative thereto, and in order to straighten the same when the billet 8 is in horizontal position or inclined from a vertical plane, it is necessary to grasp the hook itself to engage it with a ring or other article. The tongue 7, however, provides an extension within the billet loop, which, if the billet loop is prevented

from opening to a very considerable extent, will coact therewith to substantially hold the hook in longitudinal alinement with the billet, and also provides means which upon
5 a grasping of the billet and a pressing of the looped end portion of the same together will cause a relative straightening of the hook and billet and will enable the hook to be held in substantially rigid position relative to the billet for the purpose of engaging
10 the same to a ring or the like, without necessitating a touching or grasping of the hook by the hand.

I wish it understood that my invention is
15 not limited to any specific construction or arrangement of the parts except in so far as such limitations are specified in the claim.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is,—

A safety snap-hook having its bill provided adjacent to its end with laterally spaced inwardly projecting lugs, the inner sides of which are corrugated lengthwise of the hook, and a spring tongue adapted to
25 seat at its free end between said lugs and be moved into engagement with the corrugations thereof when moved laterally from neutral position.

In testimony whereof I have hereunto
30 signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL W. REYNOLDS.

Witnesses:

C. W. OWEN,

M. Q. OPPENHEIM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."